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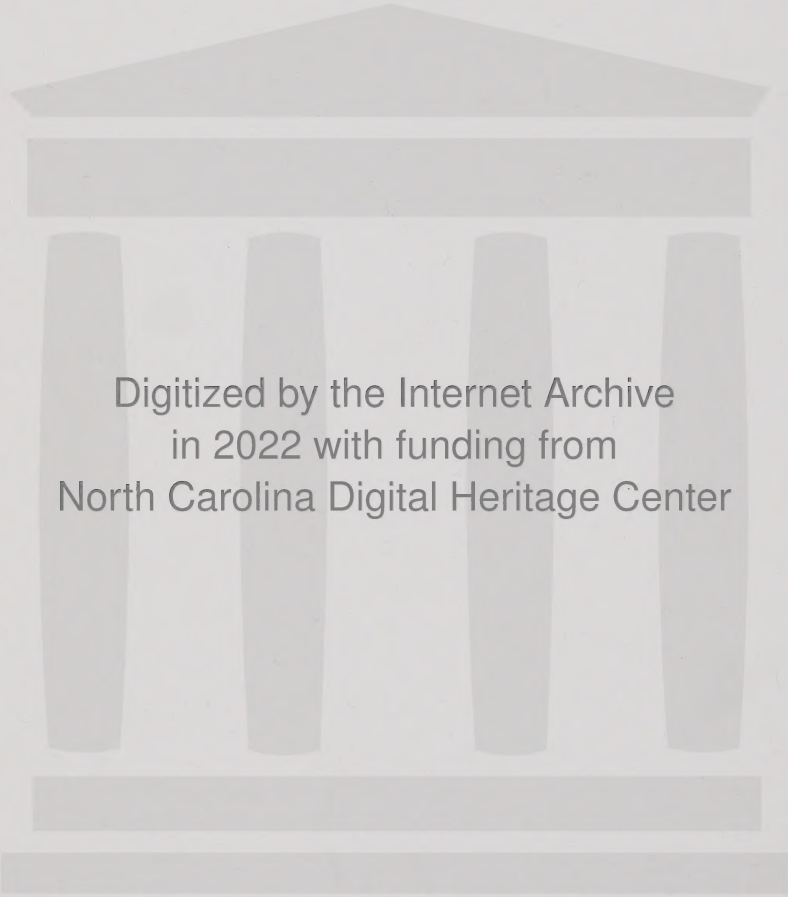


1997-98

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# PITT COMMUNITY COLLEGE

Greenville, North Carolina

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Commission on Colleges of the Southern Association of Colleges and Schools  
(1866 Southern Lane, Decatur, Georgia (404) 679-4501)  
to award Associate Degrees

## **CATALOG OF COURSES DAY AND EVENING PROGRAMS**

**Volume XXI  
1997-98**

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The North Carolina Community College System and Pitt Community College will convert to the semester system effective July 1, 1997. A significant number of changes in academic policies or programs of study may have occurred after this catalog's publication. Please contact the appropriate department or program coordinator for the most current requirements.

Pitt Community College publishes this catalog to provide students and other interested persons with information about the College and its programs. The information provided is up-to-date as of March 28, 1997. For information about changes after this date, contact the Office of Information Management Services or the appropriate division director.

The provisions of the catalog are not to be regarded as an irrevocable contract between students and Pitt Community College. The College reserves the right to change any provisions, requirements, or schedules at any time or to add or withdraw courses or program offerings. Every effort will be made to minimize the inconvenience such changes create for students.

Students having questions not answered in this publication may secure additional information from the Office of the Dean of Students, Pitt Community College, P. O. Drawer 7007, Greenville, North Carolina 27835-7007; telephone (919) 321-4211.

It is the policy of Pitt Community College not to discriminate against any person on the basis of race, color, handicap, sex, religion, age, or national origin in the recruitment and admission of students; the recruitment, employment, training, and promotion of faculty and staff; and the operation of any of its programs and activities, as specified by federal laws and regulations. Pitt Community College is an equal opportunity/affirmative action institution.

## **PRESIDENT'S MESSAGE**

Welcome to Pitt Community College. We are delighted that you are interested in our College and look forward to serving you. Our wide range of programs, courses, and support services will assist you in achieving success in your chosen career.

The success of our graduates has been a guide for the continued growth of our College. The need for a better educated workforce has increased in Pitt County, and Pitt Community College has continuously assisted by offering courses and curricula necessary to meet the demands of local and regional employers. Whether you wish to complete high school, earn a college degree, improve your job skills, or learn one of the many skills taught in our adult and continuing education programs, I am confident that you will find a service or program to meet your needs at Pitt Community College.

This catalog provides you with a detailed description of the College's requirements, procedures, and offerings. What it cannot convey, however, is the satisfaction that comes from attending Pitt Community College. Here the staff and faculty have a genuine concern for the welfare and future success of its students. The opportunity is here for you. I urge you to take full advantage of the College's total resources in the development of your skills in your chosen field.

Dr. Charles E. Russell,  
President

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# PITT COMMUNITY COLLEGE

## Academic Calendar - 1997-98

### FALL SEMESTER 1997

Faculty Workday . . . . .	Monday	August	18
Late Registration: Day and Evening . . . . .	Tuesday	August	19
Day and Evening Classes Begin . . . . .	Wednesday	August	20
Last Day to Drop/Add . . . . .	Thursday	August	21
Labor Day (campus closed) . . . . .	Monday	September	1
Student Fall Break . . . . .	Thursday	October	9
	- Saturday	October	11
Faculty and Staff Development Day . . . . .	Thursday	October	9
Last Day to Officially Withdraw . . . . .	Friday	November	14
Last Day to Remove Incompletes . . . . .	Friday	November	14
Telephone Registration for Spring Semester: . . . . .	Monday	November	10
	- Sunday	December	14
Thanksgiving (campus closed) . . . . .	Thursday	November	27
	- Saturday	November	29
Last Day of Classes . . . . .	Saturday	December	13
Reading Day . . . . .	Monday	December	15
Last Evening of Classes . . . . .			
Exam Period (Day Classes) . . . . .	Tuesday	December	16
	- Friday	December	19

### SPRING SEMESTER 1998

Faculty Development Day . . . . .	Thursday	January	8
Faculty Workday . . . . .	Friday	January	9
Late Registration: Day and Evening . . . . .	Monday	January	12
Day and Evening Classes Begin . . . . .	Tuesday	January	13
Last Day to Drop/Add . . . . .	Wednesday	January	14
Martin Luther King Holiday . . . . .	Monday	January	19
Staff Development Day/Classes meet . . . . .	TBA		
Easter Break (campus closed) . . . . .	Saturday	April	11
	- Monday	April	13
Spring Break . . . . .	Tuesday	April	14
	- Saturday	April	18
Last Day to Officially Withdraw . . . . .	Wednesday	April	8
Last Day to Remove Incompletes . . . . .	Wednesday	April	8
Telephone Registration for Summer Term: . . . . .	Monday	April	6
	- Sunday	May	10
Last Day of Classes . . . . .	Saturday	May	9
Reading Day . . . . .	Monday	May	11
Last Evening of Classes . . . . .			

Exam Period (Day Classes)	Tuesday	May	12
	- Friday	May	15
Graduation	TBA		

**SUMMER TERM 1998**

Faculty Workday	Monday	May	25
Late Registration: Day and Evening	Tuesday	May	26
Day and Evening Classes Begin	Wednesday	May	27
Last Day to Drop/Add	Thursday	May	28
Independence Day Holiday (campus closed)	Friday	July	3
Last Day to Officially Withdraw	Wednesday	July	15
Last Day to Remove Incompletes	Wednesday	July	15
Telephone Registration for Fall Semester:	Monday	July	6
	- Thursday	July	30
Last Day of Classes	Thursday	July	30
Reading Day	Friday	July	31
Last Evening of Classes			
Exam Period (Day Classes)	Monday	August	3
	- Wednesday	August	5

**FALL SEMESTER 1998**

Faculty Workday	Monday	August	17
Late Registration: Day and Evening	Tuesday	August	18
Day and Evening Classes Begin	Wednesday	August	19

## **ORGANIZATION**

### **BOARD OF TRUSTEES**

Phillip R. Dixon  
Chairman

Raymond Reddick  
Vice Chairman

Bob Brown  
William Cain  
Beverly Congleton  
Tom Craft  
James Ebron

Joseph Gantz  
Anne McGaughey  
C. Leroy Smith  
Joan B. Warren  
George Williams

G. Henry Leslie  
Vernon E. White  
Kay V. Whichard  
Honorary Trustees (*ex-officio*)

SGA President (*ex-officio*)

### **PITT COUNTY BOARD OF COMMISSIONERS**

Mark Owens  
Chairman

Kenneth K. Dews, Sr.  
Vice Chairman

Edward B. Bright  
Charles P. Gaskins  
Eugene James  
Thomas Johnson, Sr.

Farney M. Moore  
Mark Owens, Jr.  
Jeffrey E. Savage  
Edith Warren

## OFFICE OF THE PRESIDENT

Charles E. Russell, Ed.D. ....	President
Harriet B. Allen .....	Information/Receptionist/Clerical
Mary K. Langston .....	Administrative Assistant to the President
Monte Little, M.A. ....	Baseball Coach
James H. Young, Ed.D. ....	Director of Institutional Development

## OFFICE OF STUDENT DEVELOPMENT

Garrie W. Moore, Ed.D. ....	Dean of Students
Ida Albright, B.S. ....	Secretary, Dean of Students
Norma S. Barrett, M.S, N.C.C. ....	Director of Counseling
Michael L. Bridgers, M.P.A. ....	Disability/Retention Services Coordinator
John M. Cayton, M.A. ....	Health Sciences Admissions Counselor
Shiela Evans, M.Ed.. ....	Admissions Counselor
Petrina Ewing .....	Secretary/Data Entry, Admissions and Records
Betty Foreman, A.A.S. ....	Secretary, Career Planning and Placement
Yvonne C. George, M.S, N.C.C. ....	Admissions Counselor
Donna C. Hollowell, A.A.S. ....	Secretary, JobLink Center
Patricia P. Jones .....	Receptionist/Counseling
Glenda Joyner, A.A.S. ....	HRD Clerical Intake Specialist
Kathy O. Kinlaw, M.A.Ed .....	Registrar
Rudy Lloyd, B.S. ....	Director of Financial Aid
Diane Muccio .....	Technical Assistant, Placement Testing
Thomas R. Payne, A.A.S. ....	Tutorial Officer
Lisa M. Reichstein, B.S. ....	Financial Aid Officer
Leslie D. Rogers, M.Ed. ....	Assistant Dean of Students/JobLink Director
Bobbe Martin Rouse, M.A. ....	Job Developer/Follow-up Counselor
Christy W. Shields, M.A.Ed. ....	Testing Coordinator
Mary L. Smart, A.A.S. ....	Secretary/Receptionist, Admissions and Records
Hal Smith, M.A.Ed, N.C.C. ....	Admissions Counselor
Marguerite C. Stephens, M.A.Ed. . .	Recruiter/Student Activities Coordinator
AJ Tyson, M.A.Ed. ....	HRD and Weekend College Administrator
Mary White, A.A.S. ....	Secretary, Counseling
Marietta Williams, A.A.S. ....	Assistant Registrar
Wendy Wooten, B.S. ....	Financial Aid Assistant

## OFFICE OF THE EXECUTIVE VICE PRESIDENT

Edgar L. Boyd, Ed.D . . . . . Executive Vice President  
Joey Caldwell, B.F.A. . . . . Graphics Technician  
Ray W. Congleton, M.A.Ed. . . . . Coordinator of Evening Programs  
Larry C. Dendy, M.P . . . . . Assistant to the Executive Vice President  
Susan E. Everett, M.S . . . . . Director of Information Management/  
Institutional Research  
Eleanor S. Fulford . . . . . Secretary, Marketing and Public Relations  
Penny M. Hyde, B.S. . . . . Secretary, Assistant to the Executive Vice President  
Laura Lynne Garriss, A.A.. . . . . Facilities Scheduling Officer  
D. Gene Hemby, B.S. . . . . Tech Prep and Outcomes Assessment Coordinator  
Sandra L. Jones, A.A.S. . . . . Administrative Assistant, Executive Vice President  
Jennifer G. Joyner, A.A.S . . . . . Technical Support, Directors of Information  
Management/Institutional Research and Institutional Effectiveness  
Susan Q. Nobles, M.Ed.. . . . . Director of Marketing and Public Relations  
Dollie W. Prayer, A.A.S . . . . . Secretary, Coordinator of Evening Programs  
Alton Rucker, M.A. . . . . Institutional Researcher  
Lynda B. Wilms, Ed.D. . . . . Director of Institutional Effectiveness

## OFFICE OF THE VICE PRESIDENT OF ADMINISTRATIVE SERVICES

Joseph W. Hunnicutt, B.S . . . . . Vice President of Administrative Services  
Doris D. Baker, A.A.S . . . . . Purchasing Officer  
Hersel L. Bowen, A.A.S. . . . . Public Safety Officer  
Ricky D. Brown, M.B.A . . . . . Budget Officer  
Robert B. Conway . . . . . Assistant Inventory Control Officer  
Susan D. Counterman, B.S. . . . . Programmer  
J. Byron Dickens, B.S . . . . . College Store Director  
Alan T. Edwards, B.A. . . . . Chief of Public Safety  
Jenny B. Edwards, A.A.S . . . . . Accounts Payable Technician  
Jennifer A. Garriss, B.S . . . . . Computer Operator Technician  
Pat Hardee, A.A.S. . . . . Purchasing Technician  
Judy H. Harris, A.A.S . . . . . College Store Clerk/Bookkeeper  
Bethany Lane, A.A.S . . . . . Accounts Receivable Technician  
Wanda Eaton, A.A.S. . . . . Clerk, College Store  
Marvin B. Lewis . . . . . Inventory Control Officer  
William D. Lewis, M.A . . . . . Computer Systems Administrator  
Connie S. Lloyd, B.S., C.B.M.I. . . . . Business Manager  
Debra P. McGowan, M.A . . . . . Director of Human Resources  
Janice B. McGowan, B.S. . . . . Payroll Technician  
Susan A. McRorie, A.A.S . . . . . Assistant Graphic Arts Manager  
Alberta M. Moye . . . . . Secretary, Vice President of Administrative Services  
Angie Peaden, A.A.S. . . . . Accounting Technician

Houston Randolph	Public Safety Officer
Ashley R. Dicktel, A.A.S.	Secretary, Human Resources
Paul L. Suggs, Apprenticeship	Graphic Arts Manager
Charles Taft	Mail/Shipping/Receiving Clerk
Kelly Taylor	Accounting Technician
Linda V. Teel	Clerk, College Store
Alton Wadford, A.A.S.	Head Cashier/Travel Technician

**Facilities Management**

William E. Dinkins, Electrical License, A.A.S	Director of Facilities
Bobby L. Allen	Night Housekeeping
James E. Best	Night Housekeeping
Keith W. Bielby, Sr.	Grounds Supervisor
Napoleon M. Blount	Groundskeeper Assistant
Willie Brown, Jr., Diploma	Day Housekeeping
Stacy Bunting	Groundskeeper Assistant
James Bynum	Night Housekeeping
John Bynum	Groundskeeper Assistant
David L. Carmon	Night Housekeeping
Kelvin Cox	Night Housekeeping
Willie L. Cox	Night Housekeeping
Walter Ashley Dail, Jr., HVAC Diploma	Assistant to Director of Facilities/ Maintenance Technician IV
Mae Lee Daniels	Night Housekeeping
Alton Ray Dixon	Groundskeeper Assistant
Willie E. Garrison	Night Housekeeping
James T. Gorham	Night Housekeeping Supervisor
Floyd L. Haddock	Groundskeeper Assistant
Aron Harper	Night Housekeeping
Cleola Johnson	Administrative Assistant/Night Housekeeping
Timmy Joyner	Maintenance Technician I
James Langley	Night Housekeeping
Rodney McCarter	Night Housekeeping
Timothy Moore, Electrical License	Maintenance Technician II
Robert O'Neal	Maintenance Technician I
Norman C. Pate	Maintenance Technician II
Rayfield Payton	Night Housekeeping
William Darnell Reese	Night Housekeeping
Douglas Shirley	Night Housekeeping
Patricia Ann Simpson	Night Housekeeping
Larry Smart, Electrical License, A.A.S.	Maintenance Technician II
James Sterling Teel	Night Housekeeping

## LEARNING RESOURCES CENTER

Lisa C. Driver, M.L.S.	Dean of Learning Resources
Alan R. Bailey, M.L.S.	Coordinator of LRC Evening Services
Dan Bain, B.A.	Distance Education Facilitator
Mary K. Godley, A.A.S.	LRC Technical Associate for Library Services
John L. Griffin, B.F.A.	Media Production Specialist
Rita B. Harris, A.A.S.	Secretary/Bookkeeper
Lottie N. Joyner	LRC Technical Assistant for Circulation Services
Linda C. Leighty, M.A., M.S.	Director of Learning Technologies
James P. Leo	Audiovisual/Computer Equipment Repair Technician
Betty L. Newell, A.A.S.	Library Assistant
Linda M. Teel, M.L.S.	Director of Library Services
Teresa W. Thompson, A.A.S.	LRC Technical Assistant for Learning Technologies
Hazel J. Walker, M.L.S.	Reference Librarian
Ann N. Whitehurst, M.L.S.	Serials Librarian

## OFFICE OF CONTINUING EDUCATION

Jack F. Cherry, Ed.D.	Dean of Continuing Education
Ella L. Barnes, A.A.S.	Secretary, Basic Skills
James W. Brown, M.A.	Director, General Adult Education/ Community Service
Lisa B. Elmore, A.A.S.	Secretary, Dean of Continuing Education
Linda J. Fleming	Secretary, Occupational Extension
Margaret E. Green, B.A.	Lead Instructor, Compensatory Education
Tommy Joyner, B.S.	Assistant Dean/Director, Occupational Extension
Carla H. Lee, M.A.Ed.	Assessment Specialist/Chief GED Examiner, Basic Skills Education
LouAnn M. Rasberry, M.A.Ed.	Director, Basic Skills Education
Vivian L. Roach, M.A.Ed.	Instructor/Coordinator of Basic Skills and Compensatory Education
Jack Robinson, A.A.S.	Director, Industrial Training
George O. Sappenfield, Ed.D.	Director, Small Business Center
Janelle Smith, A.A.S.	Instructor/Coordinator for Nursing Assistant and Nurse Aid Related Programs
Nanette Stillwell, B.A.	Instructor/Coordinator, Computer Instruction
Sheri T. Walton, B.A.	Instructor/Coordinator, ADATC Skills Training
Glenda Washington, A.A.S.	Secretary, EMS/Nurse Aid Programs
Joyce D. Williams, A.A.S.	Secretary, Small Business Center/ Industrial Training
Peggy A. Williams, B.S.	Instructor, Compensatory Education

## INSTRUCTIONAL STAFF BY DIVISION

### Arts and Sciences

John C. Hutchens, M.A . . . . .	Division Director, Arts and Sciences
J. Kelly Adams, M.F.A . . . . .	Chairman, Advertising and Graphic Design
Tammy J. Atchison, M.S. . . . .	Biology
George L. Baka, B.F.A . . . . .	Advertising and Graphic Design
Gregory P. Baldwin, M.A . . . . .	Speech
Hilda P. Barrow, M.A.Ed . . . . .	Reading Coordinator
Ann Bellis, M.A . . . . .	Mathematics
Margaret M. Boles, M.A. . . . .	Mathematics
John R. Buck, M.A . . . . .	Biology
Catherine S. Bullock, M.Ed. . . . .	Chairman, Social Sciences
Joey Caldwell, B.F.A. . . . .	Advertising and Graphic Design
Russell Chapman, M.A. . . . .	Psychology
Cecilia M. Cobb, M.L.S . . . . .	Library Science and English
Katherine Y. Collins, M.S.H.E . . . . .	Chairman, Early Childhood
Rhonda Ellis, B.S . . . . .	Secretary, Science
Brenda Ernest, M.S.H.E. . . . .	Early Childhood
Bonnie Galloway, M.A.Ed. . . . .	Mathematics
Tom L. Hall, M.S. . . . .	Chemistry
Micah Harris, M.A.Ed, M.A . . . . .	English
Bryon W. Horton, M.S. . . . .	Mathematics and Physics
Sherry J. Horton, M.S . . . . .	Mathematics and Physics
JoAnne J. James, M.A. . . . .	Composition Coordinator
Victor E. James, M.S. . . . .	Sociology
Karen Jones, M.S. . . . .	Biology
Judith Kasperek, M.A . . . . .	Chairman, Science
Jane H. Keller, M.A., M.L.S . . . . .	English
Gregory Lackey, M.S. . . . .	Biology
Marcia J. Lambert, M.A. . . . .	Mathematics
Rebecca L. Leach, M.A.Ed. . . . .	Mathematics
Nellie Lewis, M.S . . . . .	English
Monte Little, M.A. . . . .	Health and Physical Education
Mitzi C. Logan, M.A . . . . .	Chairman, Mathematics and Physics
Tom K. Marsh, M.A . . . . .	Psychology
Sue J. Mehlich, M.A . . . . .	Chairman, English and Humanities
Sadie Oates, B.A. . . . .	Social Science
Constance L. Rhem, M.A. . . . .	Mathematics
Charles E. Saunders, M.A. . . . .	History
Wanda Smith, A.A.S. . . . .	Secretary, Arts and Sciences
Darlene Smith-Worthington, M.A . . . . .	English Lab Coordinator
Vandana Srivastava, M.S. . . . .	Mathematics
Katalin Szucs, Ph.D. . . . .	Mathematics
Charles P. White, Ph.D. . . . .	Biology
Linwood E. Woodard, M.A . . . . .	Health and Physical Education

## **Business**

Robert H. Waddell, Ed.D . . . . .	Division Director, Business
Timothy J. Broadwell, M.B.A . . . . .	Curriculum Coordinator, Accounting
Phyllis J. Broughton, M.A.Ed. . . . .	Chairman, Office Systems Technology
Glenda H. Carawan, M.A.Ed . . . . .	Medical Office Systems Technology
Wanda Card, R.R.A. . . . .	Curriculum Coordinator, Medical Office Systems Technology
Hope V. Clark, M.A.Ed., C.A.S. . . . .	Coordinator, Marketing and Retailing
Mary M. Daughtry, B.S.B.E. . . . .	Office Systems Technology
Leatrice T. Freer, M.B.A. . . . .	Coordinator, Business Administration
Linda Jones . . . . .	Cosmetology
Laura H. Gipson, M.A.Ed. . . . .	Medical Office Systems Technology
Emily Harrington, B.S.B.E. . . . .	Computer Support, Software/Network
Doug Huggins, M.A.Ed . . . . .	Medical Office Systems Technology
Donald E. Lee, M.A.Ed . . . . .	Chairman, Business Administration
J. Franklin Lee, M.B.A. . . . .	Coordinator, Real Estate, Appraisal
Fidel O. Loverton, M.B.A, C.I.S.. . . . .	Information Systems
Marla McLawhorn, R.R.A. . . . .	Medical Office Systems Technology
Karen Mazingo, M.S.A. . . . .	Curriculum Coordinator, Healthcare Management Technology
Bertha A. Mooring, A.A.S. . . . .	Secretary, Business Division
Helen M. Parks, M.S.Ed. . . . .	Information Systems
Elaine D. Seeman, M.B.A . . . . .	Chairman, Information Systems
William Sypanka, M.B.Ed . . . . .	Coordinator, Information Systems
Robert P. Tallo, M.A.Ed . . . . .	Accounting
Lee Walter Toderick, M.S, C.I.S. . . . .	Coordinator, Information Systems
Carolyn C. Tyndall, M.A.Ed. . . . .	Coordinator, Office Systems Technology
Judy Williams . . . . .	Secretary, Office Systems Technology

## **Construction Technology Division**

Jarvis E. Tripp, A.A.S. . . . .	Division Director, Construction Technology
Guerry Barbee, M.A. . . . .	Chairman, Electrical/Electronics Technology
Joe Brittain, A.A.S. . . . .	Electrical/Electronics Technology
James A. Harris, Diploma . . . . .	Chairman, Masonry
William M. Hill, B.S.I.S. . . . .	Chairman, Carpentry
Dawn Branch King, AIA, BEDA, BEDLA, BArch . . .	Architectural Technology
Roy C. Lanier, A.A.S. . . . .	Chairman, Welding Technology
William Mazingo, A.A.S. . . . .	Chairman, Air Conditioning, Heating and Refrigeration Technology
Kim Rouse, A.A.S. . . . .	Secretary, Construction Technology Division
Kevin Sessoms, B.S. . . . .	Architectural Technology
Leonard C. Van Staaldunin, B.E.D.A . .	Chairman, Architectural Technology
Jasper C. Wynne, B.S. . . . .	Chairman, Greenhouse and Grounds

## Health Sciences

Judith W. Kuykendall, R.N., Ed.D . . . . .	Division Director, Health Sciences
Roselyn Armstrong, M.A, O.T.R./L . . . . .	Chairman, Occupational Therapy Assistant
Rhonda Asher, B.S.M.T, (ASCP).. . . . .	Medical Assisting
Bobby G. Austin, B.S.R.T.(R), (MR), (CT), (CV) . . . . .	Program Director, Imaging Technology
R. Lee Braswell, Jr., B.S.R.T.(R)(T) . . . .	Program Director, Radiation Therapy
Angela T. Buck, R.N., M.S.N . . . . .	Second Level Coordinator, Nursing
DiAnne Cannon, A.A.S . . . . .	Medical Secretary, Health Sciences
Bill Clark, R.T., (N)(R), C.N.M.T, B.S. . . . .	Chairman, Radiologic Sciences
Gayle O. Cobb, R.N., B.S.N . . . . .	Nursing
Louise R. Cox, R.T. (R)(CV), B.A. . . .	Assistant Chairman, Radiologic Sciences
Pamela Dail, R.N., M.A.Ed . . . . .	Nursing
Robert L. DeSoto, M.S., M.S.W., A.C.S.W, C.C.S.W. . . . .	Human Services Technology
Carol Douglas, R.N., B.S.N. . . . .	Nursing
Frances T. Fisher, R.N., M.S.N . . . . .	Nursing
Margaret J. French, M.S . . . . .	Chairman, Human Services Technology
Lisa S. Gay, B.S., R.R.A. . . . .	Health Information Technology
Kay Gooding, M.P.H., M.A.Ed., R.R.A . . . . .	Chairman, Health Information Technology
Tommianne Haithcock, A.A.S, C.O.T.A./L. .	Instructor/Fieldwork Coordinator, Occupational Therapy Assistant
Marsha P. Hemby, R.N., C.M.A, B.A. . . . .	Chairman, Medical Assisting
Myra Gail Holloway, C.H.U.C., C.M.A, B.S.B.E. . . . .	Chairman, General Occupational Technology
Rosalie Jacobi Hutchens, B.F.A. . . . .	Secretary, Occupational Therapy Assistant Fieldwork Placement
Rebecca Hylant, R.N., M.S.N. . . . .	Nursing
Lyn M. Jacobson, R.T-R, R.D.M.S., A.A.S. . . . .	Program Director, Medical Sonography
Ann B. Land . . . . .	Divison Secretary, Health Sciences
Karen M. Lee, R.T.(R), A.A.S. . . . .	Clinical Coordinator, Radiography
Carla H. Lewis, R.N., M.S.N . . . . .	Chairman, Nursing
Charissa L. Lewis, R.N., M.S.N . . . . .	First Level Coordinator, Nursing
Mara MacKenzie, R.D.M.S., R.D.C.S., A.A.S. . . . .	Clinical Coordinator, Medical Sonography
Niki Marcelle, C.N.M.T., B.S. . . . .	Program Director, Nuclear Medicine
Donna McKeithan, R.N., B.S.N. . . . .	Nursing
B. Allen Moye, Jr., C.R.T.T, R.R.T., A.A.S. . . . .	Clinical Coordinator, Respiratory Care
Kathy Muse . . . . .	Secretary, General Occupational Technology
Pamela Paige, A.A.S. . . . .	Radiography
Latonya E. Shelton, R.N., C.M.A., A.A.S.. . . . .	Medical Assisting
R. Bruce Steinbach, C.R.T.T., R.R.T, B.A.. . . .	Chairman, Respiratory Care
Carol C. Stevens, R.N., M.S . . . . .	Nursing

M. Carolyn Strickland, C.R.T.T, R.R.T., L.P.N., A.A.S. . . . . Respiratory Care

### **Industrial Technology Division**

James E. Fulcher, CMfgE, B.S. . . . . Division Director,  
Industrial Technology  
Beryalai Angar, M.S.E.E. . . . . Electronics Engineering Technology/  
Electronic Servicing Technology  
Faye Causey . . . . . Secretary, Industrial Technology Division  
Donna Dunnehoo-Jones, M.A.Ed.. . . . Electronics Engineering Technology/  
Electronic Servicing Technology  
O. Earl Haddock, A.A.S. . . . . Automotive Systems Technology  
Richard D. Lee, A.A.S. . . . . Coordinator, Machining Technology/  
Industrial Maintenance Technology  
Dwight B. McGowan, A.A.S. . . . . Chairman, Automotive Systems Technology  
Laverne K. Ologge, B.S. . . . . Chairman, Electronics Engineering Technology/  
Electronic Servicing Technology  
James E. Ringer, B.M.E. . . . Coordinator, Industrial Construction Technology  
Hugh P. Stanley, M.A., M.A.Ed . . . . . Chairman, Industrial Management  
Technology/Human Resources Management  
Jane C. Tripp, B.S. . . . . Coordinator, Technical Drafting  
M. Travis Wooten, CMfgE, A.A.S. . . . . Chairman, Manufacturing  
Engineering Technology

### **Legal Sciences**

Wayne Coates, B.A . . . . . Division Director, Legal Sciences  
James L. Bullock, J.D., M.B.A, B.S.I.E. . . . . Paralegal Technology  
Lora G. Clark, J.D., B.A. . . . . Paralegal/Criminal Justice Technology  
Brady Davis, B.S. . . . . Basic Law Enforcement Training  
Jimmie Dye, B.A . . . . . Criminal Justice Technology  
Cindy Harrison, B.S . . . . . Basic Law Enforcement Training  
Joanne B. Venters, A.A.S. . . . . Secretary, Legal Sciences

### **Preschool Laboratory Staff**

Cyndra H. Gasperini, M.S.H.E., M.A.Ed. . . . . Director of Preschool Laboratory  
Mary Jane LaNeave, M.S.H.E . . . . . Teacher  
Deborah P. Lamb, A.A.S . . . . . Teacher  
Melanie F. Mayo, A.A.S. . . . . Teacher  
Sandra Richardson . . . . . Cook  
Rita VanLenten, A.A.S. . . . . Teacher  
Brenda B. Whichard . . . . . Secretary, Preschool Laboratory

## **GENERAL INFORMATION**

### **HISTORY OF THE COLLEGE**

In March, 1961, Pitt Community College was chartered and designated by the State Board of Education as an industrial education center. The College began its operation as Pitt Industrial Education Center during the same year. Dr. Lloyd Spaulding served as the director of the center. The programs developed and expanded, and in 1964, the school was designated a technical institute by the State Board of Education. The name was changed in July, 1964, to Pitt Technical Institute, and it opened in its new facility, the Vernon E. White Building, in September, 1964, with nine curricula and 96 students.

Dr. William E. Fulford served as the institution's president from 1964-84. During those twenty years the institution experienced many changes and much growth.

In 1970, a second building, the Robert Lee Humber Building, was completed, providing an additional 31,458 square feet to serve the citizens of Pitt County.

In 1975, an addition was made to the White Building, adding a new student lounge with various recreational facilities. This addition also provided facilities for the Business Computer Programming curriculum.

The summer of 1979 brought about two important changes to Pitt Technical Institute. The Kay V. Whichard Building, a 26,000 square foot classroom/shop facility, was completed on campus. Also, the North Carolina General Assembly enacted a bill that changed Pitt Technical Institute to Pitt Community College. The change brought about the addition of the two-year college transfer programs.

Dr. Charles E. Russell was named President of Pitt Community College in 1984.

The Learning Resources Center (LRC), the Clifton W. Everett Building, was opened in 1987. The facility provides approximately 33,000 square feet of space for library, audiovisual, and media production services and for Individualized Instruction Center services.

A vocational education classroom and lab/shop building, the A.B. Whitley Building, was opened in February, 1990. The 32,300 square foot facility provides space for the following programs: Machinist, Electronic Servicing, Electronic Engineering Technology, Architectural Technology, Manufacturing Engineering Technology, and Industrial Construction Technology.

The William E. Fulford Building, a 44,500 square foot classroom/lab building, was opened in January 1993. This facility provides space for the following programs: Imaging, Medical Assisting Technology, Associate Degree Nursing, Occupational Therapy Assistant, Phlebotomy, Radiation Therapy Technology, Radiologic Sciences, and Respiratory Care.

The Welding/Masonry Building, a 10,750 square foot facility, was opened in April, 1993.

The G. Henry Leslie Building, the college's center for Continuing Education was opened in November 1996.

The JobLink Career Center, a collaborative effort of 12 local agencies which provide job-seeking and training assistance to citizens, and qualified job applicants for employers opened in the Vernon White Building January 1997. The center assists the college in meeting its objectives for workforce development.

In the Fall of 1997, Pitt Community College and the rest of the North Carolina Community College system converted from a quarter system to a semester system. Today, Pitt Community College offers forty-one associate programs, six certificate programs, four diploma programs, and three college transfer programs.

## **LOCATION**

The College is located on Highway 11, South, between Greenville and Winterville.

## **PITT COMMUNITY COLLEGE MISSION**

The mission of Pitt Community College is to enhance the economic development and quality of life of the community, provide a positive learning environment, promote academic excellence, and educate diverse populations to succeed in the workplace and in higher education.

## **DIVERSITY LEADERSHIP STATEMENT**

Pitt Community College is committed to creating and fostering an environment which is conducive to the inclusion of minorities and females in student, faculty, and staff leadership roles. We believe that the basis of diversity is to create a climate in which the needs, values, and talents of individuals of all cultures and backgrounds are recognized, understood, and addressed in our classrooms and in our workplace.

<b>AREAS OF STUDY</b>	<b>Associate Degree</b>	<b>Diploma</b>	<b>Certificate</b>
Accounting	X		X
Advertising & Graphic Design	X		
Air Conditioning, Heating & Refrigeration Technology	X		
Architectural Technology	X		
Associate Degree Nursing*	X		
Associate in Arts /Pre-Business Administration	X		
Associate in Arts /Pre-Education	X		
Associate in Arts /Pre-Liberal Arts	X		
Automotive Systems Technology	X	X	
Basic Law Enforcement Training			X
Business Administration	X		X
Business Administration/Human Resources Technology**	X	X	X
Business Administration/Marketing & Retailing	X		X
Cardiovascular/Vascular Interventional Technology*		X	
Cardiovascular Sonography*	X		X
Carpentry		X	
Computed Tomography & Magnetic Resonance Imaging Technology*		X	X
Cosmetology			X
Criminal Justice Technology	X		
Early Childhood Associate	X	X	
Electrical/Electronics Technology	X		
Electronic Servicing Technology	X	X	X
Electronics Engineering Technology	X		X
General Occupational Technology	X		
Health Information Technology	X		
Health Unit Coordinator			X
Healthcare Management Technology	X	X	X
Human Services Technology	X	X	
Industrial Construction Technology	X		

<b>AREAS OF STUDY (continued)</b>	<b>Associate Degree</b>	<b>Diploma</b>	<b>Certificate</b>
Industrial Construction Technology/Electrical	X		
Industrial Construction Technology/Mechanical	X		
Industrial Maintenance Technology	X	X	X
Industrial Management Technology	X		
Information Systems	X		X
Information Systems /Networking Administration and Support	X		X
Information Systems/Programming	X		
Insurance			X
Machining Technology	X	X	X
Manufacturing Engineering Technology	X		X
Masonry		X	
Medical Assisting*	X		X
Medical Sonography*	X		X
Nuclear Medicine Technology*	X		
Occupational Therapy Assistant*	X		
Office Systems Technology	X	X	X
Office Systems Technology/Medical	X	X	X
Paralegal Technology	X		
Radiation Therapy Technology*	X	X	
Radiography*	X		
Real Estate			X
Real Estate Appraisal			X
Respiratory Care*	X		
Surveying Technology**			X
Welding Technology	X	X	X

\* Satisfactory admissions test results, interview, high school record, and physical examination are some of the requirements for enrollment.

\*\* Evening programs only. Contact a Pitt Community College admissions counselor for details about "day only," "evening only," and "day and evening" programs.

## **NON-DEGREE CURRICULUM CREDIT**

Students may enroll in available courses from different curricula for possible transfer or self-improvement.

## **ADMISSIONS**

Pitt Community College operates under the open-door admissions policy established in the North Carolina General Statute 115.D. All community colleges maintain an open-door admissions policy for all applicants who are high school graduates or high school leavers 18 years of age or older. The College has the right to selectively place these applicants.

### **GENERAL ADMISSIONS**

The basic requirements for curricular programs (Health Sciences Admissions excepted) are as follows:

1. The College requires high school graduation or the high school equivalency diploma for all Associate in Arts and Associate in Applied Science degrees and for most diploma and certificate programs. Selected diploma and certificate programs require students to have at least eight units of high school work or special permission. An official high school transcript is required.
2. Each applicant must submit a completed Application for Admission.
3. All students take placement tests with the exception of those transfer students who have successfully completed appropriate units in mathematics and English.
4. Applicants for Electronics Engineering Technology and Architectural Technology should have completed one unit of algebra and one unit of geometry.
5. Each applicant should make an appointment with an admissions counselor for a personal interview prior to enrollment in the College. The counseling session is designed to acquaint the student with the College and to help the student make a wise choice in program selection.

### **ASSET and COMPASS PLACEMENT TESTING**

ASSET (Assuring Successful Student Entry and Transfer) and COMPASS (Computerized Adaptive Placement Assessment and Support System) are administered on a daily basis. To register for placement testing, students must see a Pitt Community College admissions counselor in the Vernon E. White Building, Room 2. Test permits and a picture ID are required before taking the test.

## **HEALTH SCIENCES ADMISSIONS**

Health Sciences programs have additional admissions requirements including a pre-admission test. This is necessary because these programs are limited in the number of students that can be admitted each year. Guidelines and requirements for admission into the health sciences programs may be obtained from an admissions counselor.

The health sciences admissions committee will review each completed application and consider criteria including the following: admissions test scores; past academic achievement; and other factors deemed appropriate by the committee.

Application and completion of requirements for admission in Fall Semester to the health sciences programs should be completed as early as possible. The selection process begins in February.

Immunizations may be required of health sciences students.

The Pitt Community College health sciences programs are as follows:

Associate Degree Nursing	Medical Assisting Technology
Cardiovascular/Vascular	Medical Sonography
Interventional Technology	Nuclear Medicine Technology
Health Information Technology	Occupational Therapy Assistant
Health Unit Coordinator	Radiation Therapy
Human Services Technology	Radiography
Medical Assisting Technology: Phlebotomy	Respiratory Care

## **TRANSFER ADMISSIONS**

Pitt Community College will accept students from other post-secondary institutions provided applicants

1. Submit formal applications, and
2. Have official high school transcript and official transcripts from each post-secondary institution attended mailed to the Office of the Registrar.

The dean of students may refuse admission to transfer students not in good standing at previously attended post-secondary institutions.

## **READMISSION OF CURRICULAR STUDENTS**

Students re-entering after one or more semesters out of school, with the exception of the summer term, will follow normal admission procedures. Students out of school as a result of disciplinary action must appear before the dean of students and petition for readmission to the College.

## **PROVISIONAL ADMISSIONS**

A student applying too late to complete pre-entrance requirements may be admitted as a provisional student. In such cases, all requirements must be completed within the first semester of attendance, including mailing of official transcripts (high school and post-secondary) directly to the Office of the Registrar.

Students not completing admission requirements by the end of the semester will be reclassified as Non-Degree Credit. This will preclude their receiving financial aid and/or Department of Veteran Affairs (DVA) benefits.

## **HIGH SCHOOL ADMISSIONS (DUAL ENROLLMENT)**

The College admits selected high school students to appropriate college courses as space permits under the following conditions:

1. The student is 16 years or older,
2. The student must be recommended by the high school counselor and have prior written approval from the high school principal and the designated representative for the local board of education, and
3. The student is taking at least three courses at the high school and is making appropriate progress toward graduation as determined by the school principal, and
4. The registrar of the College approves the enrollment of the student. High school students are exempt from the payment of tuition and activity fee.

**HIGH SCHOOL STUDENTS ARE NOT ALLOWED TO ENROLL IN DEVELOPMENTAL COURSES AT THE COLLEGE UNDER THE DUAL ENROLLMENT POLICY.**

## **INTERNATIONAL STUDENT ADMISSIONS**

Pitt Community College has been approved by the U.S. Immigration and Naturalization Service to enroll international students from three categories: permanent residents with alien registration ('green card'), refugees, or student visa holders ('F-1').

An international student present in the United States on a student visa ('F-1') is considered a non-resident for the purpose of tuition payments. Length of stay, payment of taxes, or ownership of property, in themselves, do not qualify an international student for the status of legal resident or domicile. Neither federal nor state student financial aid is offered to an international student; therefore, he/she is required to submit an official bank statement (in dollars) from a bank or appropriate official certifying that the international student has sufficient funds to cover each year of expenses.

In addition to the normal admissions requirements, an international student must meet the additional criteria:

1. Graduation from a high school or equivalent as evidenced by an official copy of the secondary school transcript. All official transcripts must be accompanied by a certified English translation.
2. A score of 550 or better is required on the Test of English As A Foreign Language (TOEFL) examination. Exception: An international student whose country has English as the only official language is exempted from taking the TOEFL exam.

The college does not offer special English proficiency curriculum classes. All students are required to make their own housing arrangements. For further information concerning international students' admissions, contact the Office of the Dean of Students.

### **STUDENT RIGHT-TO-KNOW ACT DISCLOSURE**

Information concerning the Student Right-To-Know projected completion or graduation rate for Pitt Community College is available in the Counseling Office or the Office of the Registrar.

### **CRIME AWARENESS AND CAMPUS SECURITY ACT REPORT**

As mandated by the Crime Awareness and Campus Security Act of 1990, the Pitt Community College Public Safety Office produces an annual report which includes statistics on offenses and arrests. Copies of this report are available in the Office of Public Safety.

## **TUITION, FEES AND OTHER EXPENSES**

Financial support from local, state, and federal sources allows each student an educational opportunity at minimum cost. Tuition is set by the North Carolina General Assembly and is subject to change without notice. Textbooks, fees, and supplies are additional expenses which vary according to the program of study. The payment of all fees is required at the time of registration. Any student who does not pay fees will have his/her schedule purged from all classes. Students may not attend class until tuition is paid.

**TUITION**      *Please Note: Tuition is set by the North Carolina General Assembly and is subject to change without notice.*

### **Fall and Spring Semester Full-time Tuition**

All North Carolina residents enrolled for fourteen (14) or more curricular credit hours are charged a maximum tuition of \$280.00 per semester.

### **Summer Term Tuition**

All North Carolina residents enrolled for nine (9) or more curricular credit hours are charged a maximum tuition of \$180.00 per semester.

### **Part-time Tuition**

The tuition charge for North Carolina resident curricular students is \$20.00 times the number of credit hours for which the student is enrolled. Example: 6 credit hours x \$20.00 equals \$120.00.

### **Senior Citizens**

North Carolina residents 65 years of age or older shall be exempted from the payment of curricular tuition and extension registration fees.

### **Audit Students**

Audit students must pay the same tuition rates as other students.

### **Out-of-State Students**

The entrance requirements and admission procedures for persons who reside outside North Carolina are the same as for residents. Tuition for non-residents will not exceed \$2,282.00 per semester for full-time enrollment. For part-time students, the fee is \$163.00 per credit hour.

## **RESIDENCE CLASSIFICATION FOR TUITION PURPOSES**

Under North Carolina law, a person may qualify as a resident for tuition purposes in North Carolina, thereby being eligible for a tuition rate lower than that for non-residents. Copies of the applicable law and the State Residency Manual are available for inspection in the Office of the Dean of Students, the Office of the Registrar, and also in the Learning Resources Center, where they may be examined upon request.

## **FEES AND OTHER EXPENSES**

All tuition and fees must be paid in the Cashier's Office located in the Vernon White Building. The Cashier's Office is open Monday through Friday 8:00 a.m. to 5:00 p.m. Special hours apply during registration periods.

### **Student Activity Fee**

The student activity fee for each full-time student (12 credit hours or more) will be charged during fall and spring semesters at a rate of \$8.00 per semester. This rate is subject to change without notice.

### **Accident Insurance Fee**

Accident insurance, covering hours in school and transportation between PCC and school supervised and sponsored activities, is required at a minimum cost per semester. Students must submit claims for injury covered under the accident insurance provisions immediately, but in no instance later than 30 days, in order to expect coverage. All accidents must be reported to the dean of students within 24 hours of date of accident.

The premium for accident insurance is subject to change annually.

### **Professional Liability Insurance**

Students enrolled in Health Sciences programs are required to purchase professional liability insurance and encouraged to purchase health insurance prior to clinical practice.

### **Parking Fee**

There is a nominal charge for parking permits each semester for all students .

### **Textbooks and Supplies**

The cost of textbooks and supplies varies according to the program of study. These items may be purchased from the College Store. The College Store hours are Monday-Thursday, 8:15 a.m. - 8:00 p.m. and Friday, 8:15

a.m. - 2:30 p.m. Special hours exist at the beginning of each semester. Business hours are posted on the College Store door and bulletin boards throughout the campus.

### **Student Fees for Laboratory/Clinical/Shop**

Lab fees are charged for classes which require special equipment or supplies. These fees, which may vary by department, are indicated in course descriptions in the catalog. See course descriptions for actual fee per course.

### **REFUND POLICY**

The College is authorized to refund tuition under the regulations set forth by the North Carolina State Board of Community Colleges (23 NCAC 2d.0202 e) which state that a refund shall not be made except under the following circumstances:

1. A 100% refund shall be made if the student officially withdraws prior to the first day of class(es) of the academic term as noted in the college calendar. Also, a student is eligible for a 100% refund if the class in which the student is officially registered fails to "make" due to insufficient enrollment.
2. A 75% refund shall be made if the student officially withdraws from the class(es) prior to or on the official 20% point of the term.
3. For classes beginning at times other than the first week (seven calendar days) of the term a 100% refund shall be made if the student officially withdraws from the class prior to the first class meeting. A 75% refund shall be made if the student officially withdraws from the class prior to or on the 20% point of the class.

The refund policy is set by the North Carolina State Board of Community Colleges and is subject to change without notice.

Activity and insurance fees are nonrefundable.

Students desiring a tuition refund are asked to follow the steps listed below:

1. Contact a counselor to obtain the appropriate withdrawal form,
2. Complete the withdrawal form,
3. Submit the completed withdrawal form to the Office of the Registrar, and
4. Submit the application for refund to the Cashier's Office.

Students that prepay and then officially withdraw from the College may receive a full refund of tuition and fees if the official withdrawal is

completed before the first day of classes as published in the school calendar of the term involved.

If a student preregisters using Title IV Financial Aid funds and/or scholarships funds, and (1) fails to maintain measurable satisfactory academic progress resulting in the termination of financial aid, or (2) fails to begin classes during the first week of the term resulting in the termination of financial aid, then the College will credit the amount of tuition and fees to the specific Title IV program or scholarship from which the funds were originally allocated.

When a student recipient of Title IV Financial Aid funds withdraws or is dismissed from PCC prior to the end of an academic period, the institution will determine whether and to what extent the student received overpayment from such funds. This determination will be based upon any discrepancy between the amount of allowable costs (educational cost including room, board, books, supplies, transportation and miscellaneous expenses) incurred by the student up to the date of withdrawal and the amount of Title IV funds received by said students prior to that date.

Overpayment funds reimbursed to the institution by the student shall be credited to the specific Title IV program from which they were originally allocated.

## **ACADEMIC REGULATIONS**

### **CLASS SCHEDULE**

Pitt Community College normally offers classes between the hours of 8:00 a.m. and 10:00 p.m. five days per week, except on Friday when all classes end at 6:00 p.m.

Non-credit courses for personal, occupational, and community improvement are offered during both day, evening, and weekend hours.

With careful planning a person can complete most of the work required for a degree or diploma in certain programs by attending evening classes.

### **REGISTRATION**

The College year consists of two semesters and a summer term. Students who are pursuing a course of study must preregister or register at the beginning of each semester as they progress toward their educational objectives. Returning students must make satisfactory settlement with the College for all indebtedness prior to registration. All students will register during the prescribed registration period for that semester (refer to College Calendar).

#### **Telephone Registration and Late Registration**

Telephone Registration (TAP - Telephone Access at Pitt) is held approximately the twelfth week of each semester. Each student should make an appointment with his/her advisor to review academic progress and plan courses for the coming semester.

This opportunity is an important part of each student's program. Students and their advisors have an opportunity to discuss academic problems on an individual basis and keep abreast of progress.

Those students failing to register by phone at the designated time must complete registration on late registration day. Classes begin the day after late registration day. Attendance during the first days of class is critical to student success.

#### **Auditing Courses**

Students who wish to audit courses must complete a Declaration of Audit Status form and submit the form to the Office of the Registrar before the end of the drop/add period. Auditors receive no credit but are

expected to adhere to the same attendance policy as credit students. Participation in class discussion and examinations is at the option of the student.

Fees for auditors are the same as for regular students. In the event of limited classroom space, first priority will be given to regular credit students.

*AN AUDIT CANNOT BE CHANGED TO CREDIT NOR CREDIT TO AUDIT AFTER THE DEADLINE FOR ADDING COURSES.*

*FINANCIAL AID RECIPIENTS WILL NOT RECEIVE PAY FOR AUDITING A COURSE.*

### **Registration for Developmental Courses**

If students, as a result of placement tests, are found to be deficient in math, English, or other skills, they will be required to take appropriate developmental courses.

Developmental courses do not meet elective or graduation requirements.

### **Dropping and/or Adding Courses**

In some instances it is necessary for students to make adjustments in their schedules. To ensure that the student receives proper credit, a drop/add card should be completed and processed through the registration area and registration form validated by the cashier. The College calendar (published in the Student Handbook and the General Catalog) indicates the last day to drop or add courses. This date is subject to change with proper notification.

*NO COURSE IS OFFICIALLY DROPPED OR ADDED, INCLUDING CLASSES CANCELED BY THE COLLEGE, UNTIL THE REQUIRED PROCEDURE IS COMPLETED.*

The procedure is as follows:

1. Obtain drop/add card from the Office of the Registrar or advisor,
2. Fill out card completely,
3. Have the advisor sign the card,
4. Process through the registration area, and
5. Have the computer form validated by the cashier.

## **COURSE LOAD**

Full-time curricular students must take a minimum of 12 credit hours. Normally students take 15 to 18 hours. Students registering for more than 20 credit hours must have a cumulative grade point average of 2.0 or above or permission of the department chairman.

Students who are employed more than 15 hours a week should reduce their class load accordingly. Beginning students who have full-time employment are urged to limit class loads to 9 to 12 credit hours until they have demonstrated ability to carry a heavier schedule.

## **ATTENDANCE**

Regular and punctual class attendance is expected of all students. Instructors will/may unofficially drop students after the third week of class (see Unofficial Withdrawal) for the following reasons:

1. Any day student absent five consecutive class meetings will be unofficially dropped. (see 5 below)
2. Any evening student absent more than two consecutive class meetings will be unofficially dropped. (see 5 below)
3. A student may be reinstated into the class after being unofficially dropped if deemed appropriate by the class instructor.
4. Students may be unofficially dropped when their absences from class begin to affect the quality of their work or their grades as determined by the class instructor.
5. An instructor may choose not to unofficially drop a student if the student maintains regular, constructive communication with the instructor during an extended series of absences.

Students who choose to participate in school-related activities such as SGA and sports must adhere to the attendance policy. The student is responsible for work missed due to school-related activities. In such cases, instructors will wherever possible, work with the students involved to allow them to participate in the prearranged school activities, provided the student is in good academic standing for the course being missed (i.e., minimum "C" average).

When defining individual course attendance policies, instructors must take into consideration the between-classes time needed for students with disabilities.

This policy represents the minimum requirements for attendance. Other guidelines/policies based on the nature of a course may be added by the instructor subject to approval by the appropriate curriculum division director.

## **WITHDRAWAL FROM CLASSES**

### **Official Withdrawal**

During the first twelve weeks of a semester, a student may withdraw from courses without penalty. (See College calendar for applicable date each semester.) *NO OFFICIAL WITHDRAWALS WILL BE PERMITTED DURING THE LAST FOUR (4) WEEKS OF ANY SEMESTER. ANY EXCEPTIONS TO THIS POLICY MUST BE AGREED UPON BY BOTH THE STUDENT'S CURRICULAR DIVISION DIRECTOR AND THE DEAN OF STUDENTS.* Official withdrawals do not count as hours attempted.

Students applying for an official withdrawal during the twelve weeks of a semester must use the following procedure:

1. Obtain a withdrawal card from a counselor,
2. Complete and have advisor sign card,
3. Have card signed by financial aid and/or veteran affairs officer if receiving aid, and
4. Submit completed card to the Office of the Registrar.

After the first twelve weeks, the student should see his/her curricular division director.

Students who officially withdraw from courses will not receive grades for those courses. Only the course(s) for which they registered and the official withdrawal designation will appear on the transcript. For more information, see the counselors or the Office of the Registrar.

### **Unofficial Withdrawal**

An unofficial withdrawal from one or more classes is given to students who leave school or stop attending classes without qualifying for or following procedures for official withdrawal status. This includes students dropped for excessive absences (see Attendance) and not reinstated. Unofficial withdrawals count as hours attempted with quality points of "0" in determining the grade point average (GPA). Students who leave school without officially withdrawing will lower their GPA and jeopardize future readmission to the College. For more information see the counselors or the Office of the Registrar.

**VETERANS NOTE:** Any course for which an unofficial withdrawal or an "I" (Incomplete) is received may not be retaken for pay purposes under the Title 38, U.S. Code as amended by Public Law 93-508.

## **ALTERNATIVE CREDIT**

### **Credit by Examination**

A student who evidences prior proficiency for a course due to previous work or educational experience may apply for credit by examination provided the student is currently enrolled in the College.

Application for approval to take the examination must be made through the academic advisor and approved by the department chairman for that course, using the Permit for Credit by Examination form. If approved, the chairman will make arrangements for the student to take an appropriate test administered by a departmental instructor.

Examinations will be scheduled at the discretion of the department chairman. No student may be permitted to take an examination without presenting the properly executed Permit for Credit by Examination to the course instructor.

*ALL EXAMINATIONS MUST BE COMPLETED DURING THE FIRST 12 WEEKS OF EACH SEMESTER. A STUDENT MAY NOT TAKE AN EXAMINATION FOR CREDIT MORE THAN ONCE FOR ANY ONE COURSE.* All grades other than "F" will be recorded on the student's permanent academic record.

Students applying for credit by examination must use the following procedure:

1. Contact the advisor and the department chairman for that course to obtain the Permit for Credit by Examination,
2. Contact and have the Office of the Registrar sign the permit,
3. Pay additional nonrefundable tuition, if applicable, and
4. Present permit to instructor who will administer the examination.

The instructor administers and reports the results of the examination to the Office of the Registrar within one week of the date of approval of the permit by that office. Credit hours will count toward graduation; these will be computed in grade point average as grades and quality points will be recorded.

Credit by Examination cannot be included in the 25% residency requirements. (see Transfer Credit)

### **Challenge Examination**

Students enrolled in a course may feel they have become proficient in course subject matter based on work or educational experience. They may, with the instructor's approval, "challenge" the course by taking the challenge examination during the first twelve weeks of the semester. A student may not challenge a course more than once.

*CHALLENGE EXAMINATION DOES NOT APPLY TO AUDIT STUDENTS.* (see Audit)

### **Transfer Credit**

Curricular students are responsible for requesting official transcripts from all previously attended institutions (secondary and post-secondary).

Transcripts for all students enrolled in a curricular program will be evaluated automatically.

Students transferring to Pitt Community College may transfer courses applicable to their curriculum with comparable course content so long as the GPA of all courses being transferred does not fall below a 2.0. **EXCEPTION:** Students transferring into health science curricula programs may not transfer any health science courses with a grade below "C." Any course listed as part of the associate in arts degree may not transfer with a grade below "C". Only hours earned are transferable; grades do not transfer.

A maximum of forty (40) semester hours may be transferred from other institutions toward completing an associate degree. All transfer students must complete at least 25% of the credit hours required for a degree or diploma at Pitt Community College. Within the 25%, at least twelve (12) semester hours must be major course work (departmental prefix designation). Credit by examination cannot be included in the 25% residency requirements.

Transfer credit for work experience cannot be allowed except through the organized and supervised cooperative education (CO-OP) program. Academic credit is not allowed for previous work experience outside of the supervision of the College; however, a student may challenge relevant courses by examination. (see Credit by Examination)

Work at institutions which are not regionally accredited is evaluated on the basis of the current issue of "Transfer Credit Practices of

Designated Educational Institutions," published by the American Association of Collegiate Registrars and Admissions Officers (AACR) similar publications.

### **Credit for Non-Traditional Learning**

Pitt Community College will evaluate non-traditional educational records for possible transfer credit. Full documentation must be provided before an evaluation can be made.

A maximum of forty (40) semester hours may be transferred from other institutions toward completing an associate degree. All students receiving transfer credit for traditional and/or non-traditional learning must complete at least 25% of the credit hours required for a degree or diploma at Pitt Community College. Within the 25%, at least twelve (12) semester hours must be major course work (departmental prefix designation). Credit by examination cannot be included in the 25% residency requirements.

### **Advanced Placement Examinations/CLEP**

Students of the College may request transfer credit for subjects tested under advanced placement examinations. CLEP and DANTES General Exams and Subject Area Exams are evaluated for transfer credit. Test scores must meet ACE (American Council on Education) recommendations. Credit must be applicable to the student's current degree or diploma requirements. Advanced credit must be supported by official test score reports to be considered for transfer credit. Only hours earned are awarded.

### **Educational Experiences in the Armed Services**

Educational experiences in the armed services may be submitted for transfer credit evaluations. To request an evaluation of military service schools, the student must complete the following steps:

1. Complete one copy of the Request for Course Recommendation form for each course submitted for evaluation. This form is available in the Office of the Registrar.
2. Attach documentation of successful completion of course. Documentation may include DD Form 295 Application for the Evaluation of Educational Experiences During Military Service, DD Form 214 Armed Forces of the United States Report of Transfer or Discharge, course completion certificates, AARTS (Army/ACE Registry Transcript System)

transcripts, or MOS (Military Occupational Specialty) Evaluation Score Reports.

3. Submit completed form and appropriate documentation to the Office of the Registrar.

Military educational experiences are evaluated using the ACE (American Council on Education) Guide to the Evaluation of Educational Experiences in the Armed Services. Credit must be applicable to the student's current degree or diploma requirements. Only hours earned are awarded.

### **Experiential Learning**

Pitt Community College does not consider experiential learning or life experiences for transfer credit evaluation. However, students who evidence prior proficiency for a course due to previous work or life experiences may apply for credit by examination or challenge examination. (see Credit by Examination and Challenge Examination)

### **Advanced Placement Credit for High School Students**

Pitt Community College and Pitt County Schools have entered into an articulation agreement to provide advanced placement for selected high school courses. High school graduates who successfully complete one or more of the selected courses and present evidence of the required level of mastery of skills in the course(s) will be granted credit at Pitt Community College for the comparable course in a degree or diploma program.

The following procedure applies to awarding credit for coursework through advanced placement.

1. The PCC departmental advisor, through consultation with the student and review of appropriate documentation, will complete the PCC Advanced Placement form to recommend credit for the course. The advisor will submit the form to the department chair responsible for the course.
2. The department chair will verify the eligibility of the course for PCC advanced placement. Upon approval, the department chair will submit the form to the Office of the Registrar.
3. Upon graduation from high school, if the student enrolls at Pitt Community College within one year, the advanced placement credit will be recorded on the student's permanent academic transcript.

Credit hours will count toward graduation; the advanced placement grade (AP) will not be computed in the grade point average, and quality points will not be recorded.

### **GRADE POINT AVERAGE (GPA)**

The cumulative grade point average is determined by dividing the total number of quality points by the total number of credit hours of work attempted.

The major grade point average is calculated on the required courses for the student's current major, including only the highest grade earned on each course. (see Graduation Requirements)

### **DEAN'S LIST AND HONOR ROLL**

All full-time students in a major maintaining a semester grade point average between 3.50 and 4.00 will be recognized on the Dean's List. Those maintaining a semester grade point average between 3.00 and 3.49 will be recognized on the Honor Roll.

The Dean's List and Honor Roll are prepared by the Office of the Registrar and mailed to all local or area newspapers of the students qualifying for either. The newspaper is selected based upon the student's address of record.

A student with an "Incomplete" grade is not eligible for the Dean's List or Honor Roll in the semester the "Incomplete" is received.

## GRADING SYSTEM

The following grading system is used by Pitt Community College.

<u>Letter</u>	<u>Numerical Equivalent</u>	<u>Quality Points Per Quarter Hour</u>
A	93-100	4
B	85-92	3
C	77-84	2
D	70-76	1
F	Below 70-Failing	0
W	Unofficial Withdrawal	0
*OW	Official Withdrawal	0
*NA	Never Attended	0
*I	Incomplete	0
*AU	Audit	0
*T	Transfer Credit	0
*AP	PCC Advanced Placement	0
*S	Satisfactory	0
*U	Unsatisfactory	0
*NG	No Grade Submitted by Instructor	0

\*Not included in computing grade point average.

## INCOMPLETE

An "Incomplete" is given at the discretion of the instructor when a student demonstrates satisfactory progress in a course but needs more than one semester to complete the requirements of the course. To qualify for a grade of "I," a student must be enrolled in a course the last ten days of the semester. No grades or quality points are awarded because of incomplete work.

In order to remove an "I" without re-enrolling in the course, the student must complete the work during the first twelve weeks of the next semester immediately following receipt of the "I" (see College Calendar). An "I" that is not removed during the first twelve weeks remains on the transcript but does not calculate in the student's grade point average. If the student fails to remove the "I" during the twelve week grace period, the student must re-enroll in the course IF CREDIT FOR THE COURSE IS NEEDED.

A student receiving an "I" in a prerequisite course may not proceed to the sequential course without permission of the instructor or, if absent, the department chairman.

## **ACADEMIC PROGRESS**

The policy governing academic progress at Pitt Community College is intended to assist the student in successfully completing a chosen program of study within a given period of time. A cumulative grade point average of 2.00 must be earned in the required courses in all curricular programs.

### **Academic Probation**

A student is placed on academic probation when the cumulative grade point average falls below the academic probation level according to the standards of academic progress.

### **Unsatisfactory Academic Progress**

A student who remains on academic probation for the second consecutive semester is considered making unsatisfactory progress for that semester.

If after two (2) consecutive semesters **Veteran** students have failed to maintain minimum GPA requirements according to the academic progress scale as stated in the institutional catalog, VA educational benefits will be terminated. Veteran students may continue to attend the institution but cannot receive VA educational benefits. When a veteran student's GPA is brought back to scale, he/she may resume receipt of benefits.

### **Satisfactory Academic Progress**

A student is considered making satisfactory academic progress until placed on academic probation for the second consecutive semester; then the student is considered making unsatisfactory academic progress as of the beginning of that semester. Federal regulations require that a student receiving federal financial aid of any kind be making satisfactory academic progress (see Financial Aid).

### **Good Academic Standing**

A student who is not on academic probation or suspension is considered in good academic standing.

**Standards of Academic Progress Scale**

The following scales establish standards of academic progress to ensure that the student will attain a cumulative grade point average of 2.00 required for graduation. Academic probation is defined as any GPA less than the GPA shown in the column below.

**Scale for Diploma and Certificate Programs**

<u>Hours Toward Degree</u>	<u>GPA</u>
0-9	1.00
10-18	1.35
19-27	1.75
28-and above	2.00

**Scale for Associate Degree Programs**

<u>Hours Toward Degree</u>	<u>GPA</u>
0-10	1.00
11-20	1.25
21-30	1.50
31-40	1.75
41-50	1.90
51-and above	2.00

This policy does not apply to students classified as Non-degree (those students not working toward a degree or diploma).

Grades are mailed to students at the end of each semester.

The cumulative hours earned on the grade report includes credit hours transferred from other colleges and previous coursework taken at Pitt Community College.

**PRIVACY OF EDUCATIONAL RECORDS**

Under the Family Educational Rights and Privacy Act of 1974, the rights of the student and the responsibilities of the institution concerning the various types of student records maintained by the institution are established. Pitt Community College supports the rights and privacies afforded each student by the Act and is in compliance with its provisions.

Within the College, only those individuals acting to facilitate the student's educational pursuits shall have access to a student's educational records. This includes instructors, advisors, department

chairs, division directors, student services personnel, and other staff and faculty with an educational responsibility to the student. The College will not release educational records to individuals or agencies not associated with the College without the prior written consent of the student with the exception of those situations exempted by statute in the Act.

Each student has the right to inspect and review the educational records maintained by the College that are directly related to that student. Educational records include admission documents, registration documents, grades, and other supporting documents which are maintained in the student's permanent academic file in the Office of the Registrar. Educational records also include tests, assignments, and grade calculations maintained by faculty in departmental files. A student does not have the right to inspect documents containing educational information related to other students.

Requests to inspect and review educational records shall be made by the student in writing to the Office of the Registrar. The College will comply with such requests within a reasonable time period not to exceed forty-five days after the written request is made. Requests by students to challenge the contents of educational records must be made in writing to the Office of the Registrar.

Directory information (student's name, address, telephone, date of birth, major, participation in officially recognized activities and sports, dates of attendance, degrees and awards received, and the most recent previous educational institute attended) may, at the discretion of the College, be released without written consent of the student in accordance with the provisions of the Act. A student may prevent disclosure of directory information by notifying the Office of the Registrar in writing. Requests for non-disclosure must be filed annually.

Additional information concerning the Family Educational Rights and Privacy Act of 1974 may be obtained from the Office of the Registrar or the Learning Resources Center.

## **TRANSCRIPTS**

Student transcripts are available under the provisions of The Family Educational Rights and Privacy Act of 1974 (P.L. 93-380). Under this Act, written consent from the student is required before the student records can be released to anyone. Additional information may be obtained from the Office of the Registrar. Pitt Community College requires a written request 24 hours prior to release of a transcript.

The first two transcripts are free; subsequent transcripts are \$1.00 each.

All financial obligations to the College must be cleared before any transcript will be released.

## **TRANSFER TO OTHER INSTITUTIONS**

Students planning to transfer to four-year colleges or universities are responsible for becoming acquainted with that institution's departmental requirements in the intended major and being guided by those requirements in selecting curricular courses and electives. The College maintains a file of catalogs of many other colleges and universities in the counselors' offices and in the Learning Resources Center. The counselors and the faculty advisors will assist students in selecting an appropriate institution and in interpreting its requirements.

Students planning to complete Pitt Community College graduation requirements at another college should refer to GRADUATION AFTER TERMINATION OF ATTENDANCE.

## **CHANGES IN REGULATIONS**

Pitt Community College reserves the right to make changes in the regulations, courses, fees, and other matters of policy and procedure as deemed necessary.

## **CHANGES IN MAJOR COURSE OF STUDY**

Students desiring to change major courses of study must receive academic counseling. A request for change of curriculum is initiated with an admissions counselor, signed by both previous and new advisors, and returned to the Office of the Registrar. No registration schedule should be completed by an advisor until this is done.

Students who plan to graduate should not request a change of curriculum until all required courses have been completed in their current curriculum (although they may take courses outside the current curriculum prior to its completion). This will enable the Office of the Registrar to evaluate all transcripts for credit under the correct catalog of record. Please refer to TRANSFER CREDIT and CATALOG OF RECORD.

Students who plan to pursue two curriculums simultaneously may do so by completing a request for double major with the Office of the Registrar.

## STUDENT CLASSIFICATIONS

Freshman	A student who has earned fewer than 32 semester hours of credit
Sophomore	A student who has earned 32 or more semester hours of credit
Full-time Student	A student who is registered for twelve or more semester hours of credit
Part-time Student	A student who is registered for less than twelve semester hours of credit
Non-degree Curriculum	A full-time or part-time student not seeking a degree or diploma

## GRADUATION REQUIREMENTS

Upon recommendation of the faculty and the approval of the board of trustees, appropriate degrees, diplomas, or certificates will be awarded to students successfully completing the requirements of the curricula in which they were enrolled.

All students must:

1. Complete course requirements as prescribed in the catalog of record of the candidate for graduation (see Catalog of Record),
2. Earn a minimum of 2.0 grade point average ("C" average) in the required courses of the curriculum \* for which they are applying for graduation,
3. Clear all financial obligations to the College,
4. Complete at least 25% of credit hours required for the degree or diploma at the College, of which 12 semester hours must be major course work with appropriate departmental prefix designation (see Transfer Credit), and
5. Apply for graduation with faculty advisor by the fifteenth calendar day of the semester of anticipated graduation.

\* All health science students (excluding Human Services Technology) must maintain a grade of "C" in all major courses.

In some cases, circumstances may warrant the substitution of a course for a course required for graduation. Substitutions must be approved by the student's advisor, the division director, and the registrar.

Students should meet with their advisors and complete their graduation checklists during preregistration for the candidates' last semester of attendance. The advisors will submit a list of potential candidates for graduation to the registrar and to the dean of students. After validation by the registrar, the dean of students will be notified of candidates' eligibility for graduation. Those students determined ineligible will be notified by their advisors.

Students are eligible to graduate with honors if their major GPA is 3.50 the semester prior to graduation in the curriculum from which they are graduating.

Graduation exercises are held in May. Presence at graduation is required except when permission in absentia has been granted by the dean of students. Requests for such permission must be made in writing 30 days prior to graduation.

Students pay for their caps, gowns, and diploma jackets. The Student Government Association provides degrees, diplomas, and certificates.

## **GRADUATION AFTER TERMINATION OF ATTENDANCE**

All students who wish to receive a degree from Pitt Community College after terminating their attendance with course requirements not met must, in addition to the requirements shown in GRADUATION REQUIREMENTS, receive approval of the courses to be taken at the college they plan to attend. This approval must be in writing from the Office of the Registrar. A maximum of twelve (12) credit hours will be approved to be completed within twelve (12) months of termination of attendance.

## **CATALOG OF RECORD**

Students in continuous attendance (summer term excepted) may graduate under the provisions of the catalog in effect on their date of entry into their current curriculum, or they have the option of choosing the requirements of a subsequent issue. Students not in continuous attendance must graduate under the provisions of the catalog in effect on their last entry date into the curriculum or subsequent issues. The catalog of record for a student who does a change of major is the catalog in effect at the time the change of major is effective.

## **REPETITION OF COURSE WORK**

With the consent of their advisors, students may repeat courses in which a "D," "F," or "W" grade was earned on the first attempt.

Any course repeated will be recorded and calculated in the cumulative grade point average (GPA). Only the highest grade will be used in calculating the GPA and total semester hours of credit toward graduation.

When a student receives an "F" in a course not offered during the remainder of the student's residence, an equivalent course may be substituted for purposes of meeting program requirements upon recommendation of the student's advisor, the division director, and the registrar.

Non-Degree Curriculum students will be required to obtain approval of the department chairman to repeat a course more than two times. The student may be asked to justify the need for further course repetition.

Veterans should be aware that they cannot receive DVA benefits for repeating courses previously passed.

## **THE FACULTY ADVISOR SYSTEM**

The faculty advisor system is designed to make a contribution to the students' educational progress. Students who have declared curricula are assigned a faculty advisor. Students may know their advisors not only as instructors, but also as one from whom they may receive assistance in program planning, scheduling, and registration. The objectives of the faculty advisors are as follows:

- \* To have a conference with each new advisee as soon as possible to get acquainted.
- \* To be alert to student problems in order to assist the student in both academic and personal matters. (Problems which the advisor feels unqualified to handle should be referred to the counselors' office.)
- \* To assist the individual student in planning an academic schedule to meet course prerequisites and curriculum requirements. To assist the student in completing the graduation checklist.

- \* To maintain an academic progress file on each advisee. (This file should include grade reports, a graduation checklist, and an information sheet.)
- \* To post office hours, showing when available for consultation with students.
- \* To serve, upon request of the student, as the student's representative in conferences where decisions affecting status are made.

## **FINANCIAL AID**

The goal of Pitt Community College's financial aid office is to provide assistance to students having financial need. Need is the difference between the cost of education and the amount the student and family can afford to pay, as determined by a standard formula. Need is determined by evaluating the information provided on an aid application. Factors such as income, assets, and benefits are considered in determining the need for aid. All financial awards are determined by the institution's Financial Aid Committee. The financial aid office is open Monday through Friday from 8 a.m. to 5 p.m. and on Monday evenings from 5:00 p.m. to 8:00 p.m. for the convenience of evening students.

Financial aid is awarded on an annual basis; therefore, students must submit new financial aid applications each year. Financial aid will be awarded only for courses within a student's curriculum.

To receive financial aid, students must be enrolled in an eligible curriculum (degree or diploma) and students must also have a high school diploma or GED. Students must maintain satisfactory academic progress according to the standards of the College and not owe a refund on a grant or be in default on an educational loan.

The financial aid office will mail an award letter explaining the award amounts and dates of disbursement to each eligible aid recipient.

## **ACADEMIC REQUIREMENTS FOR SATISFACTORY PROGRESS TO MAINTAIN FINANCIAL ASSISTANCE**

Federal regulations require minimum standards of satisfactory academic progress which students must meet in order to receive Title IV financial aid which includes Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Work-Study, Federal Stafford Loan, North Carolina Student Incentive Grant, and funds from other federal or state administered programs.

A. Measurable Satisfactory Academic Progress

1. To maintain satisfactory academic progress, students must have earned a cumulative GPA according to the total number of semester hours attempted as indicated below:

DIPLOMA/CERTIFICATE PROGRAMS		ASSOCIATE DEGREE PROGRAMS	
Hours Toward		Hours Toward	
<u>Degree</u>	<u>GPA</u>	<u>Degree</u>	<u>GPA</u>
0-9	1.00	0-10	1.00
10-18	1.35	11-20	1.25
19-27	1.75	21-30	1.50
28 and above	2.00	31-40	1.75
		41-50	1.90
		51 and above	2.00

2. Students must also meet the requirements of the Measurable Time Frame Chart. For purposes of determining enrollment status, students who at the end of the drop/add period, are enrolled for 12 or more credit hours are considered full-time students. Students enrolled for 9 to 11 credit hours are three-quarter time students, and students enrolled for 6 to 8 credit hours are one-half time students. Students who are enrolled for 5 or less credit hours may be eligible for Pell Grant; the semester hours are combined for use on the Measurable Time Frame Chart. The Chart includes all hours attempted, including those for which the student did not receive financial aid.

MEASURABLE TIME FRAME CHART

<u>Semester at PCC</u>	<u>Full-Time Student</u>	<u>3/4 Time Student</u>	<u>1/2 Time Student</u>
1st	12 (Total)	10 (Total)	6 (Total)
2nd	12 (24)	10 (20)	6 (12)
3rd	12 (36)	10 (30)	6 (18)
4th	12 (48)	10 (40)	6 (24)
5th	12 (60)	10 (50)	6 (30)

For any semester after the 5th, contact the Financial Aid Office for the number of requested hours.

B. Financial Aid Probation-Unsatisfactory Academic Progress

1. Students who fail to meet the requirements in A.1 for any semester are placed on FINANCIAL AID PROBATION and considered to be making UNSATISFACTORY ACADEMIC PROGRESS. Students in this

category may continue to receive financial aid for one additional semester. If the requirements are **NOT** met at the end of this semester, his/her financial aid will be terminated until the requirements are met for reinstatement.

2. Failure to meet the requirements in A.2 (Measurable Time Frame Chart) will result in immediate termination of financial aid benefits.

3. Students who receive financial aid and withdraw from school for two consecutive semesters will not be allowed to continue receiving financial aid until they have attended one semester with no financial assistance and made satisfactory academic progress for the semester. Unusual verifiable circumstances may be appealed to the Financial Aid Committee.

### C. Appeal Process

1. Students may appeal their suspension/termination of eligibility for financial aid only for "extraordinary circumstances" to the director of financial aid.

2. Appeals must be in writing, accompanied by appropriate documentation, and presented to the director of financial aid for action by the committee which is composed of the dean of students, the director of financial aid, and the financial aid officer.

### D. Procedures for Reinstatement

1. Students who have had their financial aid eligibility terminated may be reinstated in one of the following ways:

- a. By approval of the Financial Aid Committee, or
- b. By enrolling in the College without the benefit of financial assistance until the requirements in A.1 and A.2 are met.

2. Retroactive payments of financial aid for semesters when students were on probation is prohibited.

### E. Incompletes

Students who receive incompletes in courses and who re-enroll in those courses in a subsequent term may include those hours for purposes of determining enrollment status.

### F. Non-Credit Courses

Non-credit courses and courses that are being audited may not be included in a student's enrollment status for financial aid purposes.

## **G. Maximum Number of Academic Years to Receive Degree**

Students are expected to finish their degree or program within 150% of their curriculums' normal time frame. Students who attend beyond the 150% time will not be eligible to receive financial aid. Special circumstances may be appealed to the Financial Aid Committee.

## **GRANTS**

### **Federal Pell Grant**

Federal Pell Grants are awarded to help undergraduates pay for their education after high school. For many students, these grants provide a foundation of financial aid to which aid from other federal and non-federal sources may be added. Students should contact the financial aid office for an application.

### **Federal Supplemental Educational Opportunity Grant (F-SEOG)**

A Federal Supplemental Educational Opportunity Grant (F-SEOG) is for undergraduates with exceptional financial need (with priority given to Federal Pell Grant recipients). Schools receive a limited amount of funds for the F-SEOG program, therefore, when the funds have been awarded, there will be no additional funds for the academic year.

### **North Carolina Student Incentive Grant**

Undergraduate students who are legal residents of North Carolina accepted for enrollment or enrolled full-time in good standing may apply for the North Carolina Student Incentive Grant to help pay for their educational expenses. Students must demonstrate "substantial financial need" as determined by the federal student aid application.

Students may apply for this grant by checking the appropriate blocks on the federal student aid application. The deadline for the grant is March 15 of each year.

## **LOANS**

### **Federal Stafford Loans** (formerly Guaranteed Student Loans)

Federal Stafford Loans are low interest loans made by a lender to students attending school at least **half-time**. Loans are made by a lender such as a bank, credit union, or savings and loan association. College Foundation, Inc., located in

Raleigh, North Carolina, acts as a lender for most Pitt Community College students.

The maximum amount that a student can borrow is:

- \$2,625 for a first-year dependent undergraduate student enrolled in a program of study that is a full academic year.
- \$3,500 for a second-year dependent undergraduate student, and the remainder of your program is a full academic year.
- \$6,625 for a first-year independent undergraduate student enrolled in a program of study that is a full academic year. (At least \$4,000 of this amount must be in an unsubsidized Federal Stafford Loan.)
- \$7,500 for a second-year independent undergraduate student, and the remainder of your program is a full academic year.

For new borrowers interest will be variable, but not higher than 8.25%. Variable rates are set each June.

The interest rate is shown on the promissory note for each loan.

There is an "origination fee" of 3%, which will be deducted proportionately from each loan disbursement. This fee is passed on to the federal government to help reduce the government's cost for these loans. The lender may also collect an insurance premium of up to 1% of the loan principle. This premium will also be deducted proportionately from each disbursement.

Repayment for Federal Stafford Loans begins six months after graduating, leaving school, or dropping below half-time status. Student must notify the lender in any of these cases.

Before receipt of a Federal Stafford Loan, student eligibility for a Federal Pell Grant must be determined. If eligible for the grant, the grant amount will affect the amount borrowed under the Federal Stafford Loan program.

## **Federal Plus Loans**

Federal Plus Loans are for parents who want to borrow to help pay for their children's education. This loan provides additional funds for educational expenses. This loan has a variable interest rate, adjusted each year and will be shown on the promissory note. The maximum amount that can be borrowed is the amount of the cost of education minus other aid. The lender may charge an insurance premium of up to 3% of the loan principal. This premium must be deducted proportionately from each loan disbursement

made to the student. Federal Plus Loan borrowers generally must begin repaying both principal and interest within 60 days after the last loan disbursement. There are no grace periods for Federal Plus Loans.

Before receiving a Federal Plus Loan, student eligibility for a Federal Stafford Loan and for a Federal Pell Grant must be determined. If eligible for aid from either or both of these programs, the amount of eligibility may affect the amount borrowed under the Federal Plus Loan program.

Pitt Community College also administers loans which are funded by local businesses and citizens. Students should contact the Financial Aid Office for more information about the following loan programs:

Burroughs Wellcome Loan Fund  
Doris Hall Phelps Memorial Loan Fund  
PCC Emergency Loan Fund  
PCC Nursing Loan Fund

## **FEDERAL WORK-STUDY**

The Federal Work-Study Program provides jobs for undergraduates who have a financial need as determined by an approved needs analysis program. Students are paid monthly and will receive federal minimum wage for hours of satisfactory work completed. Work schedules will be set up by the Financial Aid Office and the student's supervisor and will vary according to class schedules. Awards are made on a yearly basis and are subject to the availability of funds.

Students should complete the appropriate financial aid application to determine a need for the Federal Work Study Program. If a need is determined, they should then complete an institutional work study application. These applications may be obtained from the Financial Aid Office.

## **REFUND/STUDENT REPAYMENT POLICIES FOR TITLE IV PROGRAMS**

When a student recipient of Title IV Financial Aid funds withdraws or is dismissed from Pitt Community College prior to the end of an academic period, the institution will determine whether and to what extent such student received overpayment from such funds. This determination will be based upon any discrepancy between the amount of allowable costs (educational cost including room, board, books, supplies, transportation and miscellaneous expenses) incurred by the student up to the date of withdrawal and the amount of Title IV funds received by said student prior to that date.

Overpayment funds reimbursed to the institution by the student shall be credited to the specific Title IV program from which they were originally allocated.

## **SCHOLARSHIPS**

Scholarships are available to students based on different factors such as program of study, academic performance, need, and county of residence. Students should contact the Financial Aid Office for more information on the following scholarships:

Baer Academic Scholarship  
Carolina Power and Light Company Scholarship  
Carolina Power and Light Company Scholarship for Electrical Installation or Air Conditioning, Heating and Refrigeration  
Carolina Telephone Scholarship Program  
Carolina Telephone College Transfer Scholarship  
Phillip L. Clark NOW Fund  
William E. Fulford, Jr. Memorial Scholarship  
Greenville/Pitt County Homebuilders Association Scholarship  
North Carolina Community College Scholarships  
Pat Chenier Memorial Scholarship  
PCC Foundation Scholarships for Academic Excellence  
PCC Foundation Technical Scholarships  
PCC Foundation Vocational Scholarships  
PCC Institutional General Scholarships  
Perkins Scholarship/Grant Trust Fund  
Piggly Wiggly Scholarships  
Pitt County Electrical Contractors Association Scholarship  
Procter and Gamble Electronics Scholarships  
Service Roofing Scholarship  
Beth Butler Smithwick Memorial Scholarship  
Van Nortwick Scholarships  
Van Nortwick Scholarships for Current Pitt Community College Students  
Wachovia Technical Scholarship  
Winterville High School Class of '43 Scholarship  
Vernon E. White Scholarship  
Danny Woods Scholarship

## **OTHER SOURCES OF ASSISTANCE**

### **Job Training Partnership Act**

This program is a source of financial aid which can be utilized to offset the cost of training for individuals deemed eligible. For further information,

contact the JTPA Employment and Training Specialist in the Student Services Division.

**Vocational Rehabilitation**

Any person who has a substantial physical or mental condition which prevents employment may be eligible for services from the North Carolina Division of Vocational Rehabilitation Services. If eligibility is determined, financial assistance for educational costs may be provided as part of a total rehabilitation program. For further information contact any Vocational Rehabilitation unit office. The Greenville unit office is located at 111 Eastbrook Drive. The telephone number is 830-8560.

**North Carolina National Guard Tuition Assistance Program**

Active North Carolina National Guard members who have a minimum of two years remaining as a member of the Guard from the end of the academic period for which tuition assistance is requested may be eligible for tuition assistance. Persons desiring information or applications for this assistance should contact their unit representative.

**Local Sources of Financial Aid**

Students are encouraged to keep in touch with their respective high school guidance counselors in order that they may be aware of various kinds of scholarships granted by hometown civic clubs, church groups, or other nonprofit associations or foundations.

**Veteran Benefits**

The Veteran Benefits Laws provide financial assistance to any veteran enrolled in an approved curriculum and eligible for benefits. To be eligible, the veteran student must be enrolled in an approved curriculum and taking (for pay) only those classes required for graduation in the chosen curriculum. Veteran students must maintain satisfactory attendance, conduct, and academic progress, according to the school standards for continuing eligibility for payment.

Department of Veteran Affairs (DVA) payments for veterans in a diploma or degree program are based on credit hours per semester as indicated below:

12 or more credit hours	full-time
9-11 credit hours	three-quarter-time
6-8 credit hours	half-time
Below 6 credit hours	tuition and fees only

Records of progress (transcripts) are kept by this institution on veteran and non-veteran students. Progress records are furnished at the end of each scheduled school term.

The Pitt Community College Department of Veteran Affairs Office is open Monday through Friday from 8:00 a.m. to 5:00 p.m. and on Mondays from 5:00 p.m. to 8:00 p.m. for the convenience of evening students.

### **Dependents of Veterans**

The Department of Veteran Affairs offers up to 45 months of educational benefits for qualified dependents of certain disabled or deceased veterans. An allowance of up to \$404.00 per month is made to students under the program.

For further information on DVA benefits, the student should contact the Department of Veteran Affairs, the N.C. Department of Veteran Affairs, or the DVA Regional Office in Winston-Salem.

## **STUDENT DEVELOPMENT**

### **COUNSELING**

A variety of counseling and guidance services are available at no charge to every curriculum student from pre-admission through graduation.

The counselors are located in Room 2 of Vernon E. White building. Students are requested to schedule an appointment for counseling session but they may be seen on a walk-in basis. The counseling office is open Monday through Thursday from 8:00 a.m. to 8:00 p.m. and on Friday from 8:00 a.m. to 5:00 p.m.

**Admission Counseling:** The counselors discuss the requirements for enrollment and the procedures for general and health science admissions. Counselors interpret placement test results, make course recommendations, and assist students in making realistic decisions as they prepare to enter in Pitt Community College.

**Academic Advising:** Counselors serve as advisors to students until they choose a program of study. Students receive assistance in course registration and program planning.

**Educational Advising:** Students who are undecided about their course of study are encouraged to use the CHOICES (Computerized Heuristic Occupational & Career Exploration) guidance system. Also, students wanting to transfer are encouraged to use CHOICES to get general information,

admission requirements, and other pertinent data on postsecondary institutions.

**Personal and Social Counseling:** A student may have personal or social concerns in adapting to the College environment. The counseling staff provides a confidential atmosphere in which the student may discuss these problems. Counselors make appropriate referrals to agencies when a student has a long-term counseling need.

The Counseling Office remains in touch with students throughout their college years to facilitate the fulfillment of their plans and to make their educational endeavors meaningful and productive.

## **JOBLINK CAREER CENTER**

The JobLink Career Center assists students and graduates in career decision-making, planning for marketability, and job search. There is no charge for any of the services. The center is open Monday through Thursday from 8:00 a.m. to 8:00 p.m. and on Friday from 8:00 a.m. to 5:00 p.m. for the convenience of evening students.

The staff offers assistance to individuals and groups in the development of career goals by examining interests, aptitudes, values, and exploring career interests. Individuals may also use SIGI PLUS, a computerized career guidance program. Available educational and career resources include information on careers such as educational requirements, personal qualities, job prospects, locations, details on the nature of the work, salary ranges, and opportunities for advancement as well as 4-year college catalogs, employer information and applications, and job opportunity listings.

Placement services are provided for Pitt Community College students and alumni who register with the center. Up-to-date information on job openings from private, governmental, and educational institutions is available. The staff offers help in resume preparation, completing job applications, interview skills, and creative job search strategy. An on-site Employment Security Commission interviewer and JIS terminals are also available.

The JobLink Career Center is the liaison between Pitt Community College students and potential employers. All students and alumni are encouraged to register with the center.

## **HUMAN RESOURCES DEVELOPMENT**

Human Resources Development (HRD) is a program which prepares the student for obtaining and maintaining gainful employment. In a classroom setting, the student may upgrade their level of education, prepare

for the High School Equivalency Examination, develop helpful self-knowledge, and become introduced to the world of work. HRD offers a non-traditional entrance into the community college system without the fear of failure.

After a student successfully leaves the HRD program, employment counseling and follow-up services are available at no extra charge. These activities are aimed to enhance the student's employment opportunities.

## **DISABILITY/RETENTION SERVICES**

The Office of Disability/Retention Services is designed to provide academic, personal and technical support services to students with disabilities who qualify for postsecondary education, but whose deficits are such that they are unlikely to succeed in college without those services. Referrals are made as needed to other campus-based programs and community agencies. Complete confidentiality is assured to students. The Disability/Retention Services Office is open Monday through Friday from 8:00 a.m. until 5:00 p.m. and is located on the south side of the Vernon White building in Trailer 18.

## **ATHLETICS PROGRAM**

The intercollegiate athletics program seeks to support the Pitt Community College mission by providing opportunities for students to participate in organized competitive sports activities. The purpose of the athletics program is to promote and encourage athletics in such a way that results will be consistent and supportive with the total educational purpose of Pitt Community College to include academic success, physical and emotional well-being, and social development.

It is the philosophy of the athletics program at Pitt Community College that students can best be served in an environment that recognizes the contributions and importance of its faculty and staff. Thus, through the Student Services Advisory Committee, Faculty Senate, Student Government Association, and other campus organizations, the athletics program receives faculty, staff, and student feedback and evaluation to determine the effectiveness of the athletics program.

The athletics program is designed to meet the unique needs of a diverse group of student-athletes who come from both traditional and non-traditional backgrounds. Pitt Community College offers only intercollegiate athletics, due to the lack of interest in intramural sports. Pitt Community College accepts its responsibility to provide a fair and equitable process for selecting those who participate in athletic competition.

Pitt Community College believes that athletic participation is a privilege and seeks to provide an environment that is free from drug and substance

abuse for the purpose of enhancing athletic performance by any athlete engaged in competition.

### **Athletic Conduct Policy**

- \* Athletes must conduct themselves at all times in such a manner that will not cause embarrassment to Pitt Community College.
- \* Athletes must not use profanity.
- \* Athletes must not use drugs or alcohol.
- \* Athletes must abide by rules and regulations set forth by coach(es) of each sport and are subject to the rules governing NJCAA and ECCCCAC.
- \* Athletes must communicate with faculty regarding scheduled sports events which will involve being absent from class(es) and must be responsible for making up classwork in a timely manner.
- \* Athletes must maintain a grade point average which meets NJCAA and ECCCCAC guidelines in order to participate in athletic competition.
- \* Athletes are subject to the same academic requirements as all other students for admission, academic standing, and graduation requirements. No academic exceptions are made for student athletes at Pitt Community College.

### **HEALTH SERVICES**

Pitt Community College maintains no health facilities. The responsibility for medical services rests with students and their spouses, parents, or guardians. Emergency facilities are available at Pitt County Memorial Hospital. Entering students are required to answer the health questionnaire on the Application for Admission form. Student accident insurance is required.

Pitt Community College has an Emergency Procedures Manual and copies are available in each department of the College.

### **MENTAL HEALTH SERVICES**

PCC and the Pitt County Mental Health Center have developed a Student Assistance Program. This program is available to full-time students who might benefit from the Services of Pitt County Mental Health Center. Students who are referred to the Center by PCC receive three free visits. Students are responsible for payment after the first three visits with the fees

based on a sliding scale. Contact the Office of the Dean of Students for more information on this program.

## **FOOD SERVICE**

The College has a hot food service operated in the student lounge. Hot sandwiches, other short-order items, and fountain drinks are available. Hours of operation are 7:30 a.m. to 2:00 p.m. Monday-Friday.

Vending machines for soft drinks, cigarettes, and snacks are located in each building.

## **PRESCHOOL LABORATORY**

As part of its Early Childhood Education program, Pitt Community College has a preschool laboratory on its campus which operates Monday - Friday from 7:00 a.m. to 5:30 p.m. The PCC Preschool Laboratory is AA licensed by the North Carolina Department of Human Resources, Division of Child Development to serve children ages three to five years old.

To enroll a child in the PCC Preschool Laboratory, a parent or guardian should call or visit the Center. A waiting list is maintained by the director and openings are filled on a first-come, first-served basis, with preference given to PCC students, faculty and staff.

## **HOUSING**

The College does not provide housing facilities for students either on or off campus.

## **IDENTIFICATION CARDS**

All day students must have a valid Pitt Community College ID card while on campus. ID cards will be made on the first day of registration, day of late registration, and first Tuesday of each month (contact Disability/Retention Services office for schedule of dates). Students will be asked to present one form of identification.

## **STUDENT ORGANIZATIONS**

### **American Association of Medical Assistants (AAMA)**

Students enrolled in the Medical Assisting Technology program may join the local (Pitt County Chapter), state, and national AAMA. AAMA

meets monthly and provides opportunities for professional growth, fun, and fellowship.

### **American Institute of Architecture Students (AIAS)**

The American Institute of Architecture Students is made up of approximately 10,000 members, most of whom participate in the 170 chapters around the United States and Canada. Each chapter focuses on the needs of architectural students and plans activities to stimulate interest in the field of architecture. Membership in AIAS is open to anyone interested in the organization and its purposes.

### **Association of Information Technology Professionals (AITP)**

The student chapter of the AITP is open to all business computer programming majors at PCC. It is intended to complement classroom studies by providing opportunities for professional development and career planning through field trips, speakers, programs and interaction with information processing professionals. The student chapter is sponsored by the local (Coastal Plans) chapter which meets monthly in Greenville. Student members are invited to these meetings and may also attend the yearly regional AITP Conference which hosts a student programming contest. Students are encourage to join the AITP early in their career at PCC.

### **Delta Epsilon Chi**

Delta Epsilon Chi is the student organization for the Marketing and Retailing program. It is the college division of DECA--Distributive Education Clubs of America. Students enrolled in the Marketing and Retailing curriculum may join. No grade point requirement must be met to join.

### **Gamma Beta Phi**

Gamma Beta Phi is an honor society chartered in 1975. Members are chosen based upon GPA from the top 20% of the current full-time students. Gamma Beta Phi comes under the supervision of the SGA.

### **Phi Beta Lambda**

Phi Beta Lambda is a post-secondary business organization for students with an interest in the business world. It is a nonprofit, educational association made up of students pursuing careers in business or business education. The Pitt Community College Chapter (Xi Beta Eta) is chartered by the national and North Carolina organizations.

## **Pitt Community College Association of Nursing Students (PCANS)**

The Pitt Community College Association of Nursing Students (PCANS) contributes to nursing education and influencing the educational process; provides programs representative of fundamental and current professional interest and concerns; and aids in the development of the whole person, his/her professional role, and his/her responsibility for the health care of people of all walks of life.

Students currently enrolled in or accepted into, but not yet enrolled in PCC's Associate Degree Nursing program may join as active members. Pre-nursing students enrolled in classes leading to an associate degree, diploma, or baccalaureate degree in nursing may join as associate members.

## **Pitt Community College Chapter of the Mental Health Association of Pitt County**

The Mental Health Association in Pitt County is part of the nation's oldest and largest voluntary citizens organization which is concerned with all aspects of mental health and mental illness. They are persistent in their efforts to better inform the public about mental and emotional illnesses and to seek solutions for those who suffer from them. By paying a \$5 membership dues, students may join in the fight against mental illness.

## **Pitt Community College Paralegal Association**

Pitt Community College Paralegal Association (PCCPA) is a student organization affiliated with the North Carolina Paralegal Association, Inc. Students enrolled at least half-time in the Paralegal program may join. No grade point requirements must be met to join.

## **Pitt Community College Student Ambassadors**

Eight to ten students are selected each year to serve as student ambassadors for the college. The ambassadors serve as hosts and tour guides for special events. They also make public speaking presentations and assist with student recruiting. Students receive collegiate apparel and tuition in exchange for their services. Applications are available in the Office of the Dean of Students.

## **Southern Organization of Human Service Education (SOHSE)**

SOHSE provides a medium for cooperation and communication among Southern Area Human Services/Mental Health professionals, faculty and students; fosters excellence in teaching, research, curriculum planning and clinical skills; promotes improved human services to all individuals through greater utilization of workers at all levels; and serves members in their career development and career placement. Students in a Human Services/Mental

Health educational or training program for competence in the Human Services/Mental Health profession are eligible to join.

### **Student Government Association (SGA)**

The Student Government Association (SGA) serves as the student voice on campus. Each curriculum elects one representative and one alternate to the Association. Officers are elected from this body annually and the president serves on the Pitt Community College Board of Trustees as an ex-officio member. Activities supported by the SGA include Pitt Community College athletic events, field days, cookouts, a student newsletter, and community projects.

### **Student Occupational Therapy Association**

Pitt Community College Student Occupational Therapy Association promotes academic excellence and offers a means by which its members can learn more about the profession of Occupational Therapy. Students enrolled in the Occupational Therapy Assistant curriculum may join by completing an application for membership and paying dues.

## **PUBLICATIONS**

Pitt Community College publishes the following:

- \* College Catalog
- \* Student Handbook
- \* Program Brochures
- \* PCC Weekly Bulletin
- \* The Bulldog

Information concerning Pitt Community College's publications policies is contained in Pitt Community College's **Publications Guidelines**.

## **GUIDED TOURS**

Guided tours are available for interested groups and individuals by appointment. Contact the Office of Student Development to schedule tours.

## **CLASS RINGS**

All orders for class rings will be made with the dean of students. Notices will be posted relevant to dates for measurements.

## **TRAFFIC REGULATIONS**

All automobiles operated on the campus by day students and college personnel must be registered with the Office of Public Safety. Parking permits are purchased for each registered vehicle and must be displayed on the left side of the rear bumper. The operators of automobiles on the campus are subject to specific parking and traffic regulations. The College reserves the right to withdraw the privileges of operating an automobile on the campus for failure to abide by the regulations.

## **INCLEMENT WEATHER**

The college president will make the decision as to whether or not classes will be held during periods of inclement weather. Announcements will be made on local radio and television stations.

## **FIRE DRILLS**

Fire drills will be held periodically. The fire alarm consists of a pulsating, repeated sounding of an alarm. Personnel will exit at the outside door closest to where they are at the time the alarm is sounded and proceed in an orderly manner to a safe distance from the building. The all clear signal is a long sounding of the bell system.

Emergency exits are posted in all classrooms.

## **STUDENT RIGHTS AND RESPONSIBILITIES**

Students are responsible for the proper completion of their academic program, for familiarity with all requirements of the curriculum from which they intend to graduate, for maintaining the grade average required and at all times knowing their academic standing, and for meeting all other degree requirements. Their advisors will counsel them, but the final responsibility remains that of the student.

Students are required to have knowledge of and observe all regulations pertaining to campus life and student behavior. They are responsible for maintaining communications with Pitt Community College by keeping on file with the Office of the Registrar at all times their current address and telephone number.

## **STUDENT INVOLVEMENT IN COLLEGE DECISION MAKING**

The dean of students or assistant dean of students will meet at least on a semester basis during Fall and Spring Semesters with a representative group of students to discuss issues which will directly affect students. Appropriate topics may result from campus meetings such as advisory committees, SGA, Board of Trustees, managers, and division or departmental meetings. The dean of students may convene a larger group of students as needed for planning or problem-solving purposes. Also, focus groups are conducted as needed to gather data for changes at the college that effect students.

Student representation and participation are encouraged for departmental advisory committees, staff meetings, quality improvement teams and other related forums.

At least annually, the president and executive vice president will meet with a representative group of student leaders to express concerns and exchange ideas.

## **DISCIPLINARY ACTION**

### **Student Conduct**

It is expected that at all times students will conduct themselves as responsible adults. Destruction of school property, cheating, stealing, gambling, use of profane language, engaging in personal combat, possession of dangerous weapons, or the possession and/or use of alcoholic beverages and/or the possession and/or use of any drug as defined under the North Carolina Controlled Substance Act, G.S. 90-94 in or on any part of the Pitt Community College campus will not be tolerated. Finally, the College is considered a noise-free zone, including its hallways, walkways, driveways, and parking areas. Excessive noise of any type which detracts from an atmosphere of learning and study (unless a part of an approved College activity) is prohibited. Any violation of these regulations may result in expulsion from the College. In addition, for any infraction which is a violation of North Carolina law, the student may be turned over to the local authorities.

### **Dismissal**

A student may be dismissed from a class or from the College for conduct or personal habits which are not in the best interests of the student or of the College. Information on dismissal and reinstatement procedures may be obtained from the Office of the Dean of Students.

### **Due Process**

Students who question the fairness of disciplinary action taken against them are entitled to due process by submitting a written notice of appeal. The

appeal is heard by the Hearing Committee (Judicial Review Board), which is composed of two representatives of the Student Government Association and two faculty members appointed by the executive vice president of the College. The decision of the committee is final, subject only to the student's right to appeal to the President of the College or ultimately to the Board of Trustees. The provisions of due process will be applicable to all actions involving suspensions, extensions, probation, and dismissal. Additional information may be obtained from the dean of students.

## **STUDENT CONCERNS**

Student concerns regarding Title IV HEA programs and other program guidelines can be directed to the dean of students or the executive secretary of the North Carolina Eligibility Review Committee, Suite 109, 130 Penmarc Drive, Raleigh, NC 27603-2434.

## **COLLEGE/WORKPLACE ANTI-VIOLENCE POLICY**

Safety and security of all students, staff, faculty and customers is a primary concern of Pitt Community College. Therefore, acts of violence made by or against any of the aforementioned will not be tolerated. Students, staff, faculty and customers committing acts or threats of violence will be subject to disciplinary action that may result in dismissal/ suspension from the college and/or having privileges suspended.

Pitt Community College has a **zero tolerance** for violence and therefore prohibits the following behaviors:

- \* any act or threat of violence made by an employee, student or customer against another;
- \* any act or threat of violence, including, but not limited to, intimidation, harassment, or coercion;
- \* any act or threat of violence which endangers the safety of employees, customers, vendors, contractors, or the general public;
- \* any act or threat of violence made directly or indirectly by words, gestures, or symbols;
- \* use or possession of weapons on the college campus.

## **SUBSTANCE ABUSE AND COMMUNICABLE DISEASE POLICY**

Pitt Community College recognizes its responsibility to provide

- \* a wholesome environment of health education awareness for students, faculty, and staff,
- \* a climate which discourages alcohol and substance abuse and the spread of communicable diseases, and
- \* the implementation of those measures which foster good school/community relations in the pursuit of maximized learning experiences for all its students.

Pitt Community College will conduct educational programs as needed to inform students, staff, and faculty about substance abuse and communicable diseases, including warning signs and preventive measures. The educational program may include, but not limited to, written publications, audio and video presentations, guest speakers, seminars, workshops, health fairs, and other similar publications and activities. The College will also appoint a task force, composed of representatives from all segments of the institution, to advise and assist in implementing policies, programs, and procedures in support of these endeavors.

Substance abuse assistance will focus on actions such as:

- \* providing existing human resources for early intervention for individuals with a chemical problem,
- \* offering educational drug abuse prevention programs,
- \* referring persons needing assistance to existing community agencies, while preserving the dignity of the individual and the confidentiality of their student record, and
- \* referring students exhibiting erratic and/or disruptive behavior to the dean of students where students will be subject to disciplinary action.

The possession and/or use of any drug as defined under the North Carolina Controlled Substance Act, G. S. 89-90 through G.S. 90-94 in or on any part of the Pitt Community College campus will not be tolerated. For any infraction which is a violation of Federal or N.C. Law student will be turned over to local authorities.

Policies regarding communicable diseases are as follows:

- \* Persons infected with a communicable disease will not be excluded from enrollment or employment or restricted in their access to college services or facilities unless medically- based judgments in individual cases establish that exclusion or restriction is necessary to the health and safety of the individual or to the health and safety of other members of the College community.
- \* Any student, college employee (either full-time or part-time) and any employee of contractors or contracted services who knows or has reasonable basis for believing that he or she is infected with a communicable disease has the responsibility of reporting this fact on a confidential basis, to the appropriate dean.
- \* Persons who know or have reasonable basis for believing that they are infected with a communicable disease are expected to seek expert advice about their health circumstances and are obligated ethically and legally to conduct themselves responsibly in accordance with such knowledge for the protection of other members of the community.
- \* The College will widely publicize and carefully observe the safety guidelines established by the U.S. Public Health Service and the Center for Disease Control for the handling of blood and other body fluids and secretions in all areas of the College where such fluids or secretions may be encountered.

### **CONTROLLED SMOKING POLICY**

Pitt Community College has a "Friendly" Controlled Smoking Policy which allows smoking on campus in designated areas only.

### **CANVASSING, PEDDLING, AND SOLICITING POLICY**

Canvassing, peddling, and soliciting are not allowed on the PCC campus. Door to door sales, distribution of handbills, and placement of materials on automobiles are not allowed on the PCC campus.

Student organizations must request permission from the dean of students to hold special sale campaigns, solicitation activities, or to post materials on the campus. Non-student organizations or individuals must request permission from the vice president of administrative services to conduct similar activities.

## **LEARNING RESOURCES CENTER**

The Learning Resources Center (LRC) at Pitt Community College provides library, audiovisual, media production, distance learning, and other teaching/learning resources and services to support and enrich the educational programs of the College. These resources and services are available to students, faculty, and staff of Pitt Community College and to the adult citizens of Pitt County.

LRC resources and services include a wide variety of print and nonprint materials, technical equipment, support facilities, and specialized services. The print materials collection includes books, magazines and journals, newspapers, pamphlets, government publications, and other printed materials. Audiovisual materials in the LRC collection include films, filmstrips, laser discs, filmloops, transparencies, slides, audio and video tapes, records, and computer software. Microfilm copies of back issues of selected magazines, journals, and newspapers and certain historical records of the Pitt County area are also available for use in the LRC. Equipment needed for the utilization of LRC materials and for the production and/or duplication of certain instructional materials is provided by the LRC.

A staff of professional librarians and media specialists, technicians, specialized technical assistants, and library/LRC assistants provide instruction and assistance in the use of LRC materials, equipment, and services at all hours the LRC is open.

The LRC is open Monday through Thursday from 7:45 a.m. to 9:30 p.m., on Friday from 7:45 a.m. to 5:00 p.m., and on Saturday from 8:00 a.m. to 1:00 p.m. (closed Sundays and holidays). Located in the Clifton W. Everett Building, the LRC is arranged and furnished to provide a pleasant atmosphere conducive to study and to leisure-time use of the variety of resources and services available.

## **COOPERATIVE EDUCATION (CO-OP)**

The cooperative education program is designed to give students the opportunity to integrate their classroom study with practical experience in their major fields by working and attending school.

### **Eligibility**

All students enrolled in programs offering CO-OP for academic credit who have completed one semester or who are already employed in work-related jobs are eligible to enter the cooperative education program if they meet the following requirements:

1. Students must have a 2.0 GPA and/or approval of the department chairperson and division director, and
2. Students must plan to graduate from Pitt Community College.

### **Application Procedure**

Students interested in the cooperative education program should follow the procedure outlined below:

1. The student will obtain an application form from the Division Director's Office and make an appointment with the division director to review the completed application.
2. The division director or designee will conduct an interview with the student with regard to career goals and possible CO-OP assignments.
3. If the student is accepted, the division director and the department chairperson or advisor will be prime resources in locating and/or approving an appropriate CO-OP assignment.
4. The employer interviews and/or selects the student from a group of applicants.

### **Academic Credit**

1. One (1) credit hour will be given for the satisfactory completion of each semester's cooperative training assignment of ten hours per week. Grades given by the faculty advisor will be based on reports and evaluations submitted by the student and the employer. Reports of credit will be made to the Office of the Registrar by the division director.
2. A student may receive a maximum of two credit hours during any one semester. Each curriculum program specifies the maximum number of credit hours allowed toward degree or diploma requirements.
3. Credits earned with the approval of the department chairperson substitute for required or elective courses within the curriculum guidelines.
4. Students enrolled in a college transfer program can earn up to six (6) credit hours of add-on credit.

Students interested in cooperative education should visit their Division Director's Office or contact their faculty advisors. The Division Director's Office is open Monday through Friday from 8:00 a.m. to 5:00 p.m.

## **CONTINUING EDUCATION**

The Continuing Education Division at Pitt Community College serves adults from the community, business, and industry. Various programs are offered for individuals to meet particular needs and interests. Opportunities exist to upgrade occupational skills, to acquire new skills, to complete high school, and to pursue activities for personal enrichment. Classes are held on-campus and at various off-campus facilities such as public schools, community buildings, churches, civic centers, industrial plants, and fire stations. Courses are open to all adults 18 years of age or older. In some specific cases, specific requirements must be met. High school students 16 - 18 years of age may be permitted to enroll with approval from the appropriate public school official. A Continuing Education course is a short course that is complete within itself and is designed to meet specific needs.

### **MISSION**

The Division of Continuing Education at Pitt Community College seeks to provide relevant and high quality instruction by continually responding to the needs and interests of business, industry, and the community at large. In that pursuit, the Division is dedicated to serving all adults in their quest for improvement of employment skills, discovery of new and emerging technology, pursuit of basic skills, and commitment to lifelong learning.

The mission will be accomplished by a unified committed effort by all employees:

- \* to become the leading providers of workplace skills training;
- \* to use the best technology available to prepare the workforce for employment;
- \* to partner with other organizations to encourage economic development;
- \* to help adults access further educational pursuits by responding to their lifelong learning needs;
- \* to respond to the need to improve basic skills thereby helping eradicate poverty and illiteracy;
- \* to react timely and positively to internal and external customers.

### **SCHEDULE OF COURSES**

A schedule of Continuing Education classes is published periodically and distributed throughout Greenville and surrounding areas. Classes are organized upon demonstration of sufficient interest and availability of the required facilities and instructors. Newspaper, radio, and television are utilized to announce course offerings. Classes may be scheduled for

mornings, afternoons, evenings, or weekends according to the needs of the participants. The College reserves the right to change, add, or withdraw courses or program offerings from the schedule at any time. The Division encourages interested citizens to contact them concerning areas of interest.

## **COURSE CREDIT**

Generally courses offered in the Continuing Education Division are non-credit. Credit will be given in the Adult High School Diploma Program. CEU's (Continuing Education Units) are awarded for certain training programs, courses, and seminars. Ten contact hours of class earn one CEU. Written acknowledgement of course completion or participation may be provided to individuals upon written request. Certificates may be awarded upon completion of a single course and/or a cluster of courses.

## **REGISTRATION AND ATTENDANCE**

Registration for classes is normally completed at the first class meeting on a first-come basis. Selected courses may require pre-registrations indicated in course publicity. Interested students are encouraged to seek information about a particular course via telephone. A minimum number of participants may be required before a class can be offered or continued. Pitt Community College has the right to place students in appropriate levels of training as deemed necessary by the College.

## **FEES**

The basic registration charge for a Continuing Education Division course is the occupational extension fee established by the North Carolina General Assembly. Deviation from the basic fee may be mandated by state statute for individuals and/or groups; by the source of funding and self-supported courses.

Specific fees may be charged for items required in a course in addition to normal supplies and materials provided by the college.

Insurance cost is a specific fee required of Continuing Education students in identified courses teaching shop, physical exercises, and clinical experiences. The exception to the requirement would be students identified by their employers with insurance or workman's compensation. Insurance participation is optional for other students. The structure is set annually by the insurance provider.

Continuing Education students wishing to participate in student activities may do so by paying an activity fee based upon the number of hours

enrolled in a given semester. Continuing Education students who meet on-campus for a large number of hours are encouraged to participate in all activities provided curriculum students by paying the fee.

Continuing Education students who take an occupational extension course more than twice within a five-year period shall pay a pro-rata share of the actual cost of the course. The fee will be the base registration fee or greater. The exception to the repetition fee is when the course is required for certification, licensure, or recertification.

## **REFUND POLICY**

The Office of Continuing Education may refund the registration fee only for courses identified as "Occupational Extension". The registration fee may be refunded under the following circumstances:

- \* A student who officially withdraws in person in the Office of Continuing Education prior to the first class meeting or if the class fails to "make" due to insufficient enrollment is eligible for a 100% refund.
- \* A student who officially withdraws in person at the Office of Continuing Education or with class instructor prior to or on the official 20% point of the class is eligible for a 75% refund.
- \* Requests for refunds will not be considered after the 20% point.

To determine eligibility for refund, the student may contact the Office of Continuing Education. The refund policy is set by the North Carolina State Board of Community Colleges and is subject to change without notice.

## **COURSE DESCRIPTIONS**

Course descriptions are available upon request by calling or visiting the Continuing Education Division. Individuals who desire counseling or other special assistance may contact either the instructor or the Continuing Education Division.

## **BOOKS AND SUPPLIES**

Many Continuing Education courses require textbooks and special supplies. When a text is required, students will be notified through course publicity and/or at the first class meeting. Students are generally responsible for purchasing their text and class supplies.

## **OCCUPATIONAL PROGRAMS (WORKFORCE TRAINING)**

One of the major goals of Pitt Community College is to provide opportunities for the citizens to prepare for new occupations or to upgrade their knowledge and skills in their current employment. These opportunities are provided through single courses or a series of courses specifically designed for an occupation.

These courses are designed for the specific purposes of training an individual for employment, upgrading the skills of persons presently employed, and re-training others for new employment in occupational fields. They are offered to people in all technical or vocational occupations and vary in length according to the complexity of the skill and the need of the employee or employer. Most occupational courses are developed and taught on request from a group or an employer. Courses are usually offered at a time and place convenient to the employee and/or employer.

### **General Occupational Courses**

The following are examples of general occupational courses:

Blue Print Reading  
Commercial Driver's License  
Computer Software Training  
CPR  
Effective Teacher Training

Estimating for Building Trades  
First Aid  
Industrial Safety  
Nursing Assistant

### **Specialty Occupational Programs**

#### **Criminal Justice/Law Enforcement Training**

Several short courses and seminars are conducted to upgrade and train law enforcement and correctional officers. Some courses are as follows: Introduction to Police Science, Courts and Law, Laws of Arrest, Search and Seizure, General Criminal Investigation, and Jailer Certification Training. The College also offers two-year associate degrees in criminal justice and a certificate in the Basic Law Enforcement Training Program (BLET).

#### **Emergency Services Training**

The Emergency Services Program is designed to provide various levels of Emergency Medical Services training. The courses are designed to prepare students for various levels of state certification that may be required to be an emergency care provider.

## **Fire Rescue Training**

Fire Rescue Training Program is designed to provide fire and rescue personnel the opportunity to gain technical information and skill in modern fire fighting through a variety of learning experiences. Usually these courses are conducted in the local fire departments for the volunteer firemen, who train as an organized group utilizing equipment and methods they would ordinarily use in preventing and suppressing fire.

Some of the subject areas for volunteer firemen are as follows: arson detection, compressed gas emergencies, fire apparatus practices, hazardous materials, introduction to fire fighting, ladder practices, hose practices, protective breathing equipment, and fire fighting procedures. Courses such as Home Safety, Fire Prevention, and Industrial Fire Brigade Training are available to the public and industry as well as fire service personnel.

## **Food Service/Hospitality Training**

This program is provided to train food service personnel in the basics of the food service industry. An example is Food Service Technician I. This program utilizes the training materials and certification of the Educational Foundation of the National Restaurant Association which covers "front of the house" and "back of the house" operations. Special emphasis is placed on sanitation, safety, security, customer service, equipment, procedures, beverage control, communications, teaming, etc. Other areas of hospitality training such as manager, front desk, supervision, computer, etc., can be provided as needed.

## **Licensure/Certification**

The Licensure/Certification Program is designed to provide training that a significant number of occupations in North Carolina require as a prerequisite to employment or as a continuing requirement to maintain currency in an occupational area.

The Continuing Education Division offers specific training prescribed by the licensure or certification agency. The cooperating agency or professional group issues the initial certification or recurring documentation. Certification courses include Tanning Bed, Notary Public Education, Real Estate - Basic and Elective and CFC (Chlorofluoro carbon), Recovery/Recycling.

## **Management Development Training**

Management Development Training courses are designed for potential and active supervisors who want to prepare for more effective leadership and advancement. Courses are offered both on and off campus. The courses are

flexible in terms of content and meeting times. Every effort is made to fit course content to particular individual, industrial, or business needs.

### **Professional In-Service Programs**

**Teacher Certificate Renewal:** Local superintendents responsible for providing in-service training for teachers coordinate with the Continuing Education Division to develop special courses designed to meet the needs of the local school unit. The Division assists in the development and presentation of approved courses by providing the needed personnel, facilities, and services in coordination with the local school unit.

**Other Professional In-Service:** Various institutions and agencies require employee upgrading through the offering of in-service classes. The Division of Continuing Education coordinates with each agency to develop the in-service program most appropriate to its needs.

### **Quality Training**

Continuing Education is dedicated to providing quality training to support the customer oriented/continuous improvement/employee empowerment concepts practiced in industries and businesses throughout the area. Instructors are available to deliver a complete quality training program or individual courses. The range includes introductory courses as well as specific detailed practical approaches to communication, decision-making, teaming, and data collection skills. The division is licensed to offer several nationally recognized quality programs including Zenger-Miller, Total Quality Transformation, and ISO-9000 Training. An organization interested in beginning a quality program or improving their current practice should consult with a Continuing Education Director to plan an appropriate program.

### **Safety Training (OSHA)**

The Division works closely with the North Carolina Department of Labor to provide required OSHA compliance and safety training. The training may be tailored to a specific organizational need and offered at the requestor's site. Smaller organizations may choose to send employees to Safety Institutes held periodically on the main campus.

## **BUSINESS AND INDUSTRY SERVICES**

The primary purpose of the Business and Industry Services group is to administer several special-funded programs which directly address the training needs of business and industry.

### **Apprenticeship**

**Focused Industrial Training  
New and Expanding Industry  
Small Business Center**

All of these programs and services are directly related to new and sustained economic growth. Contact with state, regional, and local agencies associated with economic development is an important responsibility of the Continuing Education Division.

Classes may be arranged to meet specific needs such as training people for new industries locating in the area, training new people for certain industry expansion programs, and training existing skilled or semi-skilled workers in new product manufacture or for new technology. These classes may be held at the industrial site, on-campus, or at some other convenient location. Courses are designed specifically for and may be scheduled at times convenient for the interested groups or industries.

**Apprenticeship**

The Apprenticeship Program is recognized as one of the leading methods of acquiring skills and knowledge necessary to become a craftsperson. Labor, business, industry, and PCC work together to provide programs consisting of on-the-job experience and related instruction. The Continuing Education Division provides the related instruction and industry provides the on-the-job experience. The apprentice may attend evening or daytime classes or study through individualized instruction programs. Anyone interested in an apprenticeship program should consult his or her employer or the Continuing Education Division.

**Focused Industrial Training**

The FIT Program is designed to respond to the training needs of employers and employees in existing industries. Often training programs are developed in response to new technologies or demands in the workplace and may cover such topics as industrial mechanics, industrial electronics, and technology and industrial supervision. This training is of particular importance to industries that need specific training for a small group of employees. The FIT Director should be contacted to provide customer service.

**New and Expanding Industries Program**

The Continuing Education Division works closely with the Business and Industry Services section of the North Carolina Community College System to provide training services to prospective employees of a new or expanding industry.

The FIT Director works closely with the employer to design a customized training program. The nature of the job to be trained for and the

level of skill needed by the potential workers determine the content and duration of the training program. Eligibility for this specially funded program is obtained when a company creates 12 or more new jobs.

### **Small Business Center**

The Small Business Center at Pitt Community College is designed to respond to the training needs of the area's small business owners, managers, personnel, and others in business as well as those who plan to start a small business. Training sessions are offered in the form of workshops, seminars, and short-term courses. Topics such as management, marketing, advertising, accounting, salesmanship, and computer skills are covered in the training sessions.

The following are examples of Small Business Center courses:

Small Business Basics	Customer Relations
Small Business Planning	Marketing
Small Business Bookkeeping	Financial Planning
Small Business Supervision	Computers

The Small Business Center serves as a resource center to provide publications and video viewing to help with small business problems. Management aids provided by the Small Business Administration (SBA) are available as well as the SBA Starting-Out series for people planning a new business. The Small Business Center provides consulting by appointment. Service details may be provided to potential customers who contact the Director of the Small Business Center.

### **COMMUNITY SERVICES/GENERAL ADULT EDUCATION**

The Community Service/General Adult Education Programs are designed to provide courses, seminars, and activities that contribute to the community's overall cultural, civic, and intellectual growth and to assist adults in the development of new skills or in upgrading of existing ones in their avocational, academic, and practical skills areas.

The Community Service Program provides non-credit courses which enable adults to develop knowledge and skills in areas of general interest. The Division will modify courses and activities to meet specific needs and interests of its adult participants. The following are some examples of general interest courses:

Art: Painting, Drawing, Sketching	Pottery
Arts and Crafts	Prenatal Education (Lamaze)
Baking and Decorations	Rug Hooking
Calligraphy	Seasonal Decorations

Conversational French, German, Spanish  
Creative Writing  
Fiber Arts  
Handyperson Repair  
Investments and Securities

Sewing  
Sign Language  
Spinning and Natural Dyes  
Weaving

## **BASIC SKILLS EDUCATION**

The Continuing Education Division offers remedial opportunities to hundreds of Pitt County citizens every year who for one reason or another lack the basic skills that would enable them to compete in today's economy. The Adult Basic Education Program (ABE) provides education up to eighth grade level. The Adult High School Diploma (AHS) program and the General Educational Development (GED) programs are available to students who do not have a high school education. English as a Second Language (ESL) provides instruction to meet the varied needs of immigrants and refugees. Compensatory Education is a program whose focus is on the skills needed by mentally handicapped adults to function as independently as possible. More detailed information follows on each program.

### **Adult Basic Education**

Adult Basic Education is designed to improve the reading and math skills of persons who seek self-improvement through organized classes. The goal of the program is to help the student function more effectively in day-to-day life. Computer-based instruction is available as an added incentive for students working towards their goals. Classes may be established throughout the Pitt County area and may be co-sponsored with churches, schools, business/industry or community organizations. Renewed emphasis has recently been placed on Workplace Literacy, Family Literacy, Homeless Literacy, and Migrant Literacy/Citizenship. There are no charges for the classes or materials.

### **Adult High School Diploma Program**

The Adult High School Diploma Program provides instruction designed to qualify a student for a Pitt County Schools diploma. Students wishing to enter the Adult High School Diploma Program may contact the Basic Skills Office. An individual program of study will be developed for the student. Students who successfully complete all required courses and pass the N.C. High School Competency Tests will receive the diploma.

### **General Educational Development (GED) Classes**

Adult High School classes are designed to prepare adults to take the General Educational Development (GED) tests. Adults may enroll in morning, afternoon, or evening classes at specified locations in Greenville and Pitt

County areas. Program content covers reading and writing skills, mathematics, social studies, and science. There are no charges for the classes.

### **High School Diploma Equivalency/GED**

Adult residents of North Carolina who have not completed high school may earn a High School Diploma Equivalency by passing a battery of five tests. These tests are the General Educational Development (GED) tests.

A High School Diploma Equivalency Certificate is recognized by employers and educational institutions and is issued by the North Carolina Department of Community Colleges. Pitt Community College is the only official GED Testing Center in Pitt County.

Persons interested in further information or in taking the GED tests should contact the Learning Center. The center administers the tests by appointment. There is a fee of \$7.50 for taking the GED tests.

### **English as a Second Language**

English as a Second Language classes are available for migrants and other foreign-born adults wishing to improve their English communication skills. Classes may be held at locations throughout Pitt County as well as campus. Industrial groups with special needs for employees should contact the Basic Skills Office.

### **Learning Center**

Adult Basic Education classes (reading, writing, and math improvement), GED preparation classes, Adult High School Diploma Program, and general education courses are offered in the Learning Center located in the Everett Building on the Pitt Community College campus. Students may use books, computers, or other teaching resources. Courses are available during the day and evening. Hours of the Center are 8:00 a.m. to 9:30 p.m. Monday - Thursday, 8:00 a.m. - 5:00 p.m. Friday.

### **Compensatory Education**

Compensatory Education is designed to enable adults with mental retardation to:

- \* Become more independent and self-directed
- \* Become more familiar with basic occupational skills
- \* Acquire skills to meet and manage community, social, career and personal adult responsibilities.

Compensatory Education classes are available on the Pitt Community College campus, at The Education Center for Advanced Development (ECAD), at the Eastern Carolina Vocational Center, and at various locations in Pitt County. There is no charge for materials or instruction.

## **WORKSHOPS, SEMINARS, AND CONFERENCES**

Workshops, seminars, and conferences are planned and offered by Pitt Community College on a variety of topics in cooperation with civic groups, non-profit organizations, or by special requests from the citizens of Pitt County.

The workshops and seminars may carry CEU credit if arrangements have been made in advance with Pitt Community College and if participants meet necessary requirements for receiving credit.

## **SELF-SUPPORTING COURSES**

Self-supporting courses are courses which the college may provide at the request of the community but for which the college receives no state budget. Financing of these courses by the college shall be on a self-supporting basis. Recreation programs are an example of self-supporting courses.

## **CURRICULUM PROGRAMS**

## ACCOUNTING (A25100)

The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the "language of business," accountants assemble and analyze, process, and communicate essential information about financial operations.

In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
ACC 120	Principles of Accounting I	3	2	0	4
ACC 121	Principles of Accounting II	3	2	0	4
ACC 129	Individual Income Taxes	2	2	0	3
ACC 150	Computerized General Ledger	1	2	0	2
ACC 220	Intermediate Accounting I	3	2	0	4
ACC 221	Intermediate Accounting II	3	2	0	4
ACC 225	Cost Accounting	3	0	0	3
ACC 240	Government and Not-For-Profit Accounting	3	0	0	3
ACC 269	Auditing	3	0	0	3
ACC 279	Advanced Auditing	3	0	0	3
BUS 110	Introduction to Business	3	0	0	3
BUS 115	Business Law I	3	0	0	3
BUS 116	Business Law II	3	0	0	3
BUS 228	Business Statistics	2	2	0	3
CIS 110	Introduction to Computers	2	2	0	3
CIS 120	Spreadsheet I	2	2	0	3
ECO 251	Principles of Microeconomics	3	0	0	3
	<b>TOTALS</b>	<b>45</b>	<b>18</b>	<b>0</b>	<b>54</b>
<b>GENERAL EDUCATION COURSES</b>					
COM 231	Public Speaking	3	0	0	3

ENG 111	Expository Writing	3	0	0	3
ENG 112	Argument-Based Research	3	0	0	3
MAT 161	College Algebra	3	0	0	3
MAT 161A	College Algebra Lab	0	2	0	1
PSY 150	General Psychology	3	0	0	3
*	Humanities/Fine Arts Electives	3	0	0	3
<b>TOTALS</b>		<b>18</b>	<b>2</b>	<b>0</b>	<b>19</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>		<b>64</b>	<b>20</b>	<b>0</b>	<b>74</b>
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\* Recommended Electives

Humanities/Fine Arts Electives:

HUM 115; PHI 240

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has a certificate option. Contact the program director for specific requirements.

## ADVERTISING AND GRAPHIC DESIGN (A30100)

The Advertising and Graphic Design curriculum is designed to provide students with knowledge and skills necessary for employment in the graphic design profession, which emphasizes design, advertising, illustration, and digital and multimedia preparation of printed and electronic promotional materials.

Students will be trained in the development of concept and design for promotional materials such as newspaper and magazine advertisements, posters, folders, letterheads, corporate symbols, brochures, booklets, preparation of art for printing, lettering and typography, photography, and electronic media.

Graduates should qualify for employment opportunities with graphic design studios, advertising agencies, printing companies, department stores, a wide variety of manufacturing industries, newspapers, and businesses with in-house graphics operations.

### Course and Hour Requirements

		<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>					
ART 131	Drawing I	0	6	0	3
ART 132	Drawing II	0	6	0	3
GRD 110	Typography I	2	2	0	3
GRD 113	History of Graphic Design	3	0	0	3
GRD 131	Illustration I	1	3	0	2
GRD 132	Illustration II	1	3	0	2
GRD 141	Graphic Design I	2	4	0	4
GRD 142	Graphic Design II	2	4	0	4
GRD 151	Computer Design Basics	1	4	0	3
GRD 152	Computer Design Techniques I	1	4	0	3
GRD 160	Photography Fundamentals I	1	4	0	3
GRD 170	Exhibit Design	1	4	0	3
GRD 241	Graphic Design III	2	4	0	4
GRD 242	Graphic Design IV	2	4	0	4
GRD 265	Digital Print Production	1	4	0	3
GRD 280	Portfolio Design	2	4	0	4
	<b>TOTALS</b>	<b>22</b>	<b>60</b>	<b>0</b>	<b>51</b>
<b>GENERAL EDUCATION COURSES</b>					
ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
ENG 115	Oral Communication	3	0	0	3

MAT 115	Mathematical Models	2	2	0	3
*	Humanities/Fine Arts Electives	3	0	0	3
	Social/Behavioral				
	Sciences Electives	3	0	0	3
	<b>TOTALS</b>	<b>17</b>	<b>2</b>	<b>0</b>	<b>18</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>40</b>	<b>62</b>	<b>0</b>	<b>70</b>
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#### **\* Recommended Electives**

##### **Humanities/Fine Arts Electives:**

ART 111; ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211;  
HUM 212; MUS 110; PHI 210; PHI 240; REL 110; REL 211; REL 212

##### **Social/Behavioral Sciences Electives:**

PSY 118; PSY 150; SOC 210; SOC 213; SOC 220

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

## AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY (A35100)

The Air Conditioning, Heating, and Refrigeration Technology curriculum, provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. In addition, the A.A.S. degree covers residential building codes, residential system sizing, and advanced comfort systems.

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. AAS degree graduates should be able to demonstrate an understanding of system selection and balance, and advanced systems.

### Course and Hour Requirements

		<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>					
AHR 110	Introduction to Refrigeration	2	6	0	5
AHR 111	HVACR Electricity	2	2	0	3
AHR 112	Heating Technology	2	4	0	4
AHR 113	Comfort Cooling	2	4	0	4
AHR 114	Heat Pump Technology	2	4	0	4
AHR 130	HVAC Controls	2	2	0	3
AHR 133	HVAC Servicing	2	6	0	4
AHR 140	All-Weather Systems	1	3	0	2
AHR 151	HVAC Duct Systems I	1	3	0	2
AHR 160	Refrigerant Certification	1	0	0	1
AHR 210	Residential Building Code	1	2	0	2
AHR 211	Residential System Design	2	2	0	3
AHR 212	Advanced Comfort Systems	2	6	0	4
AHR 215	Commercial HVAC Controls	1	3	0	2
AHR 220	Commercial Building Codes	1	2	0	2
AHR 225	Commercial System Design	2	3	0	3
AHR 240	Hydronic Heating	1	3	0	2
BPR 130	Blueprint Reading/Construction	1	2	0	2
ISC 115	Construction Safety	2	0	0	2
WLD 112	Basic Welding Process	1	3	0	2
<b>TOTALS</b>		<b>31</b>	<b>60</b>	<b>0</b>	<b>56</b>

**GENERAL EDUCATION COURSES**

ENG 111	Expository Writing	3	0	0	3
ENG 115	Oral Communication	3	0	0	3
HUM 115	Critical Thinking	3	0	0	3
MAT 115	Mathematical Models	2	2	0	3
*	Social/Behavioral				
	Sciences Electives	3	0	0	3
	<b>TOTALS</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

**FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
CIS 130	Survey of Operating Systems	2	3	0	3
	<b>TOTALS</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>4</b>

**TOTAL CREDITS FOR AAS DEGREE**

<b>48</b>	<b>65</b>	<b>0</b>	<b>75</b>
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\* Recommended Electives

Social/Behavioral Sciences Electives:

PSY 118; PSY 135; SOC 215

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

## ARCHITECTURAL TECHNOLOGY (A40100)

The Architectural Technology curriculum provides individuals with knowledge and skills that can lead to employment in the field of architecture or one of the associated professions.

Students receive instruction in construction document preparation, materials and methods, environmental and structural systems, building codes and specifications, and computer applications as well as complete a design project. Optional courses may be provided to suit specific career needs.

Upon completion, graduates have career opportunities within the architectural, engineering, and construction professions as well as positions in industry and government.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
ARC 111	Introduction to Architectural Technology	1	6	0	3
ARC 112	Construction Materials and Methods	3	2	0	4
ARC 113	Residential Architectural Technology	1	6	0	3
ARC 114	Architectural CAD	1	3	0	2
ARC 211	Light Construction Technology	1	6	0	3
ARC 213	Design Project	2	6	0	4
ARC 230	Environmental Systems	3	3	0	4
*	Major Course Electives	19/20	32	10	26/27
	<b>TOTALS</b>	<b>31/32</b>	<b>50</b>	<b>10</b>	<b>49/50</b>
<b>GENERAL EDUCATION COURSES</b>					
ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
MAT 121	Algebra/Trigonometry I	2	2	0	3
MAT 122	Algebra/Trigonometry II	2	2	0	3
PSY 150	General Psychology	3	0	0	3
*	Humanities/Fine Arts Electives	3	0	0	3
	<b>TOTALS</b>	<b>16</b>	<b>4</b>	<b>0</b>	<b>18</b>

**FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>48/49</b>	<b>54</b>	<b>10</b>	<b>68/69</b>
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**\* Recommended Electives****Major Course Electives:**

ARC 131; ARC 132; ARC 141; ARC 160; ARC 220; ARC 240; ARC 250; ARC 264; COE 111; COE 115; PHY 131

**Humanities/Fine Arts Electives:**

HUM 115; HUM 230; PHI 240

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

## ASSOCIATE DEGREE NURSING (INTEGRATED) (A45100)

The Associate Degree Nursing curriculum provides individuals with the knowledge and skills necessary to provide nursing care to clients and groups of clients throughout the lifespan in a variety of settings.

Courses will include content related to the nurse's role as provider of nursing care, as manager of care, as member of the discipline of nursing, and as a member of the interdisciplinary team.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN) which is required for practice as a Registered Nurse. Employment opportunities include hospitals, long-term care facilities, clinics, physicians' offices, industry, and community agencies.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
BIO 165	Anatomy and Physiology I		3	3	0	4
BIO 166	Anatomy and Physiology II		3	3	0	4
NUR 110	Nursing I		5	3	6	8
NUR 120	Nursing II		5	3	6	8
NUR 130	Nursing III		4	3	6	7
NUR 210	Nursing IV		5	3	12	10
NUR 220	Nursing V		4	3	15	10
PSY 241	Developmental Psychology		3	0	0	3
<b>TOTALS</b>			<b>32</b>	<b>21</b>	<b>45</b>	<b>54</b>
<b>GENERAL EDUCATION COURSES</b>						
BIO 175	General Microbiology		2	2	0	3
ENG 111	Expository Writing		3	0	0	3
ENG 114	Professional Research and Reporting		3	0	0	3
HUM 115	Critical Thinking		3	0	0	3
PSY 150	General Psychology		3	0	0	3
SOC 210	Introduction to Sociology		3	0	0	3
<b>TOTALS</b>			<b>17</b>	<b>2</b>	<b>0</b>	<b>18</b>
<b>FOUNDATION COURSES</b>						
ACA 111	College Student Success		1	0	0	1
<b>TOTAL CREDITS FOR AAS DEGREE</b>			<b>50</b>	<b>23</b>	<b>45</b>	<b>73</b>

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

Satisfactory completion of the 4th semester fulfills educational requirements for individuals seeking to apply to take the Licensed Practical Nurse Exam.

This program is approved by the North Carolina Board of Nursing.

### **ASSOCIATE IN ARTS/PRE-BUSINESS (A10100)**

At the time of publication, this program is still under design by the North Carolina Community College System. Students interested in this program should indicate their interest during the admission process for referral to specialized advisors.

### **ASSOCIATE IN ARTS/PRE-EDUCATION (A10100)**

At the time of publication, this program is still under design by the North Carolina Community College System. Students interested in this program should indicate their interest during the admission process for referral to specialized advisors.

## ASSOCIATE IN ARTS/PRE-LIBERAL ARTS (A10100)

### Course and Hour Requirements

	Class	Lab	Clin/ WExp	Cred. Hour
<b>GENERAL EDUCATION AREA REQUIREMENTS</b>				
Composition	6	0	0	6
Humanities/Fine Arts	12	0	0	12
Literature				
Fine Arts/Foreign Language				
Humanities				
Natural Sciences	8	0	0	8
Mathematics/Quantitative	6	0	0	6
Social/Behavioral Science	12	0	0	12
Electives	20	0	0	20
<b>FOUNDATION COURSES:</b>				
ACA 111 College Student Success	1	0	0	1
<b>TOTAL CREDITS FOR AA DEGREE</b>	<b>65</b>	<b>0</b>	<b>0</b>	<b>65</b>

Recommended Courses:

Composition: ENG 111, ENG 112, ENG 113, ENG 114

Humanities/Fine Arts:

*Literature (at least 3 SHC):* ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 261, ENG 262

*Fine Arts/Foreign Language (at least 3 SHC):* ART 111, DRA 111, DRA 112, DRA 122, MUS 110, MUS 112, SPA 111, SPA 112

*Humanities (at least 2 SHC):* HUM 160, HUM 211, HUM 212, PHI 210, PHI 240, REL 110, REL 211, REL 212

*Speech/Communications:* COM 110, COM 120, COM 231

Natural Sciences: AST 111, AST 111A, BIO 110, BIO 111, BIO 112, BIO 140, BIO 140A, CHM 131, CHM 131A, CHM 132, PHY 110, PHY 110A, PHY 151, PHY 152

### Mathematics/Quantitative:

Math labs are required but the hours will NOT transfer and will not count toward meeting the 44 SHC General Education requirement.

*Mathematics (at least 3 SHC):* MAT 161, MAT 161A, MAT 162, MAT 162A, MAT 263

*Quantitative (select no more than 3 SHC):* CIS 110, CIS 115, MAT 155, MAT 155A

### Social/Behavioral Science (select a total of 12 SHC):

*History (select at least 3 SHC):* HIS 111, HIS 112, HIS 114, HIS 115, HIS 131, HIS 132

*Social Sciences:* ANT 210, ANT 221, ECO 151, ECO 251, ECO 252, GEO 111, POL 120

*Behavioral Sciences:* PSY 150, PSY 237, PSY 241, PSY 281, SOC 210, SOC 213, SOC 220, SOC 225, SOC 240

Electives: ACC 115, ACC 120, ACC 121, ANT 210, ANT 221, ART 111, AST 111, AST 111A, BIO 110, BIO 111, BIO 112, BIO 140, BIO140A, BIO 163, BIO 165, BIO 166, BIO 168, BIO 169, BIO 175, BUS 115, BUS 116, BUS 228, CHM 131, CHM 131A, CHM 132, CIS 110, CIS 115, COM 110, COM 120, COM 231, DRA 111, DRA 112, DRA 122, ECO 151, ECO 251, ECO 252, ENG 231, ENG 232, ENG 233, ENG 241, ENG 242, ENG 243, ENG 261, ENG 262, GEO 110, GEO 111, HEA 110, HEA 111, HIS 111, HIS 112, HIS 114, HIS 115, HIS 116, HIS 131, HIS 132, HUM 160, HUM 211, HUM 212, MAT 155, MAT 155A, MAT 161, MAT 161A, MAT 162, MAT 162A, MAT 263, MUS 110, MUS 112, PED (any PED courses), PHI 210, PHI 230, PHI 240, PHY 110, PHY 110A, PHY 151, PHY 152, POL 120, POL 130, PSY 135, PSY 141, PSY 150, PSY 237, PSY 241, PSY 281, REL 110, REL 211, REL 212, SOC 210, SOC 213, SOC 220, SOC 225, SOC 240, SPA 111, SPA 112

## AUTOMOTIVE SYSTEMS TECHNOLOGY (A60160)

The Automotive Systems Technology curriculum prepares individuals for employment as automotive service technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field.

Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains.

Upon completion of this curriculum, students should be prepared to take the ASE exam and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

### Course and Hour Requirements

		<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>					
AUT 115	Engine Fundamentals	2	3	0	3
AUT 116	Engine Repair	1	3	0	2
AUT 141	Suspension and Steering Systems	2	4	0	4
AUT 151	Brake Systems	2	2	0	3
AUT 152	Brake Systems Laboratory	0	2	0	1
AUT 161	Electrical Systems	2	6	0	4
AUT 162	Chassis Electrical and Electronics	2	2	0	3
AUT 163	Chassis Electrical and Electronics Laboratory	0	2	0	1
AUT 164	Automotive Electronics	2	2	0	3
AUT 171	Heating and Air Conditioning	2	3	0	3
AUT 181	Engine Performance-Electrical	2	3	0	3
AUT 182	Engine Performance-Electrical Laboratory	0	3	0	1
AUT 183	Engine Performance-Fuels	2	2	0	3
AUT 184	Engine Performance-Fuels Laboratory	0	3	0	1
AUT 185	Emission Controls	1	2	0	2
AUT 221	Automotive Transmissions	2	6	0	4
AUT 231	Manual Drive Trains/Axles	2	3	0	3
AUT 232	Manual Drive Trains/Axles Laboratory	0	3	0	1
AUT 241	Advanced Chassis/Suspension	2	6	0	4

AUT 281	Advanced Engine Performance	2	2	0	3
<b>TOTALS</b>		<b>28</b>	<b>64</b>	<b>0</b>	<b>52</b>

**GENERAL EDUCATION COURSES**

ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
MAT 115	Mathematical Models	2	2	0	3
PHY 110	Conceptual Physics	3	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	1
*	Humanities/Fine Arts Electives	3	0	0	3
	Social/Behavioral Sciences Electives	3	0	0	3
<b>TOTALS</b>		<b>17</b>	<b>4</b>	<b>0</b>	<b>19</b>

**FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
CIS 113	Computer Basics	0	2	0	1
<b>TOTALS</b>		<b>1</b>	<b>2</b>	<b>0</b>	<b>2</b>

<b>TOTAL CREDITS FOR AAS DEGREE</b>		<b>46</b>	<b>69</b>	<b>0</b>	<b>73</b>
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\* Recommended Electives

Humanities/Fine Arts Electives:

ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211; PHI 240

Social/Behavioral Sciences Electives:

PSY 118; PSY 150; SOC 210; SOC 213; SOC 220; SOC 252

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has a diploma option. Contact the program director for specific requirements.

## **BASIC LAW ENFORCEMENT TRAINING (C55120)**

Basic Law Enforcement Training (BLET) is designed to give students essential skills required for entry-level employment as law enforcement officers with state, county, or municipal governments, or with private enterprise.

This program utilizes State-commission-mandated topics and methods of instruction. General subjects include, but are not limited to, criminal, juvenile, civil, traffic, and alcoholic beverage laws; investigative, patrol, custody, and court procedures; emergency responses; and ethics and community relations.

Successful graduates receive a curriculum certificate and are qualified to take certification examinations mandated by the North Carolina Criminal Justice Education and Training Standards Commission and/or the North Carolina Sheriffs' Education and Training Standards Commission.

### **Course and Hour Requirements**

	<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>				
CJC 100 Basic Law Enforcement Training	9	27	0	18
<b>TOTAL CREDITS FOR CERTIFICATE</b>	<b>9</b>	<b>27</b>	<b>0</b>	<b>18</b>

Cooperative Education Work Experience is not allowed.

Students should complete this program in 16 weeks.

## BUSINESS ADMINISTRATION (A25120)

The Business Administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small business or industry.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
ACC 120	Principles of Accounting I	3	2	0	4
ACC 121	Principles of Accounting II	3	2	0	4
BUS 110	Introduction to Business	3	0	0	3
BUS 115	Business Law I	3	0	0	3
BUS 116	Business Law II	3	0	0	3
BUS 121	Business Math	2	2	0	3
BUS 137	Principles of Management	3	0	0	3
BUS 153	Human Resources Management	3	0	0	3
BUS 225	Business Finance	2	2	0	3
BUS 228	Business Statistics	2	2	0	3
BUS 230	Small Business Management	3	0	0	3
BUS 238	Integrated Management	3	0	0	3
CIS 111	Basic PC Literacy	1	2	0	2
CO 251	Principles of Microeconomics	3	0	0	3
CO 252	Principles of Macroeconomics	3	0	0	3
MKT 120	Principles of Marketing	3	0	0	3
MKT 220	Advertising and Sales Promotion	3	0	0	3
OST 284	Emerging Technologies	2	0	0	2
<b>TOTALS</b>		<b>48</b>	<b>12</b>	<b>0</b>	<b>54</b>
<b>GENERAL EDUCATION COURSES</b>					
COM 231	Public Speaking	3	0	0	3
ENG 111	Expository Writing	3	0	0	3

ENG 114	Professional Research and Reporting	3	0	0	3
HUM 115	Critical Thinking	3	0	0	3
MAT 161	College Algebra	3	0	0	3
MAT 161A	College Algebra Lab	0	2	0	1
PSY 150	General Psychology	3	0	0	3
<b>TOTALS</b>		<b>18</b>	<b>2</b>	<b>0</b>	<b>19</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>		<b>67</b>	<b>14</b>	<b>0</b>	<b>74</b>
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Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has a certificate option. Contact the program director for specific requirements.

## BUSINESS ADMINISTRATION/HUMAN RESOURCES MANAGEMENT (A2512C)

Human Resources Management is a concentration under the curriculum title of Business Administration. The curriculum is designed to meet the demands of business and service agencies. The objective is the development of generalists and specialists in the administration, training, and management of human resources.

Course work includes studies in management, interviewing, placement, needs assessment, planning, compensation and benefits, and training techniques. Also included are topics such as people skills, learning approaches, skills building, and development of instructional and training materials.

Graduates from this program will have a sound business educational base for life-long learning. Students will be prepared for employment opportunities in personnel, training, and other human resources development areas.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
ACC 120	Principles of Accounting I		3	2	0	4
BUS 115	Business Law I		3	0	0	3
BUS 135	Principles of Supervision		3	0	0	3
BUS 137	Principles of Management		3	0	0	3
BUS 151	People Skills		3	0	0	3
BUS 217	Employment Law and Regulations		3	0	0	3
BUS 234	Training and Development		3	0	0	3
BUS 235	Performance Management		3	0	0	3
BUS 236	Advanced Training and Development		3	0	0	3
BUS 252	Labor Relations		3	0	0	3
BUS 253	Leadership and Management Skills		3	0	0	3
BUS 254	Advanced People Skills		3	0	0	3
BUS 256	Recruitment, Selection, and Personnel Planning		3	0	0	3
BUS 258	Compensation and Benefits		3	0	0	3
BUS 259	HRM Applications		3	0	0	3
CIS 111	Basic PC Literacy		1	2	0	2
ECO 151	Survey of Economics		3	0	0	3

ISC 112	Industrial Safety	2	0	0	2
MKT 120	Principles of Marketing	3	0	0	3
<b>TOTALS</b>		<b>54</b>	<b>4</b>	<b>0</b>	<b>56</b>

#### **GENERAL EDUCATION COURSES**

ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
MAT 115	Mathematical Models	2	2	0	3
*	Humanities/Fine Arts Elective	3	0	0	3
	Social/Behavioral Sciences Elective	3	0	0	3
<b>TOTALS</b>		<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>		<b>69</b>	<b>6</b>	<b>0</b>	<b>72</b>
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\* Recommended Electives

Humanities/Fine Arts Electives:

ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211; PHI 240

Social/Behavioral Sciences Electives:

PSY 118; PSY 150; SOC 210; SOC 213; SOC 220

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has certificate and diploma options. Contact the program director for specific requirements.

## BUSINESS ADMINISTRATION/MARKETING AND RETAILING (A2512F)

Marketing and Retailing is a concentration under the curriculum title of Business Administration. This curriculum is designed to provide students with fundamental skills in marketing and retailing.

Course work includes marketing, retailing, merchandising, selling, advertising, computer technology, and management.

Graduates should qualify for marketing positions within manufacturing, retailing, and service organizations.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
ACC 120	Principles of Accounting I	3	2	0	4
BUS 115	Business Law I	3	0	0	3
BUS 137	Principles of Management	3	0	0	3
ECO 251	Principles of Microeconomics	3	0	0	3
MKT 120	Principles of Marketing	3	0	0	3
MKT 122	Visual Merchandising	3	0	0	3
MKT 123	Fundamentals of Selling	3	0	0	3
MKT 220	Advertising and Sales Promotion	3	0	0	3
MKT 225	Marketing Research	3	0	0	3
MKT 227	Marketing Applications	3	0	0	3
*	Major Course Electives	20/21	4	20	24/25
<b>TOTALS</b>		<b>50/51</b>	<b>6</b>	<b>20</b>	<b>55/56</b>
<b>GENERAL EDUCATION COURSES</b>					
COE 231	Public Speaking	3	0	0	3
ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
MAT 161	College Algebra	3	0	0	3
MAT 161A	College Algebra Lab	0	2	0	1
*	Humanities/Fine Arts Elective	3	0	0	3
	Social/Behavioral Sciences Elective	3	0	0	3
<b>TOTALS</b>		<b>18</b>	<b>2</b>	<b>0</b>	<b>19</b>

**FOUNDATION COURSES**

ACA 111 College Student Success	1	0	0	1
<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>69/70</b>	<b>8</b>	<b>20</b>	<b>75/76</b>

**\* Recommended Electives**

**Major Course Electives:**

BUS 110; BUS 121; CIS 111; COE 112; COE 115; MKT 121; MKT 233; MKT 224; MKT 228; OST 284

**Humanities/Fine Arts Electives:**

ART 111; HUM 115; MUS 110

**Social/Behavioral Sciences Electives:**

PSY 150; SOC 210

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has a certificate option. Contact the program director for specific requirements.

## CARDIOVASCULAR/VASCULAR INTERVENTIONAL TECHNOLOGY (D45140)

The Cardiovascular/Vascular Interventional Technology curriculum teaches students to use specialized equipment to visualize vascular structures and to assist physicians in diagnostic and interventional procedures. *Individuals entering this curriculum must be registered or registry eligible radiologic technologists by the ARRT.*

The technologist, through academic and clinical studies, is prepared to provide quality patient care and professional communication skills while performing scheduled and emergency angiographic studies utilizing sterile technique, advanced radiographic and specialty equipment, and radiation protection techniques.

Graduates of this program may be eligible to sit for the American Registry of Radiologic Technologists Advanced Level Examination in Cardiovascular Interventional Technology. Technologists may find employment in medical facilities where vascular, cardiovascular, and/or interventional imaging procedures are performed.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
CIT	211	Patient Care	3	0	0	3
CIT	212	Angiographic Equipment and Supplies	3	0	0	3
CIT	213	Radiographic Pharmacology	3	0	0	3
CIT	214	Vascular Imaging I	3	0	0	3
CIT	224	Vascular Imaging II	3	0	0	3
CIT	230	CIT Clinical Practicum I	0	0	21	7
CIT	240	CIT Clinical Practicum II	0	0	21	7
CIT	250	CIT Clinical Practicum III	0	0	24	8
<b>TOTALS</b>			<b>15</b>	<b>0</b>	<b>66</b>	<b>37</b>
<b>GENERAL EDUCATION COURSES</b>						
ENG	111	Expository Writing	3	0	0	3
HUM	115	Critical Thinking	3	0	0	3
<b>TOTALS</b>			<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>
<b>FOUNDATION COURSES</b>						
ACA	111	College Student Success	1	0	0	1
<b>TOTAL CREDITS FOR DIPLOMA</b>			<b>22</b>	<b>0</b>	<b>66</b>	<b>44</b>

Students enrolled full-time and making satisfactory progress should complete this program in three semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

The Cardiovascular/Vascular Interventional Technology program is accredited by the Joint Review Committee on Education in Radiography.

The medical advisor for this program is Julian W. Vainright, M.D.

## CARDIOVASCULAR SONOGRAPHY (A45160)

The Cardiovascular Sonography curriculum provides the individual with the knowledge and skills necessary to acquire, process, and evaluate the human heart and vascular structures. A cardiovascular sonographer uses high frequency sound waves to produce images of the heart and vascular structures.

Course work includes effective communication and patient care skills combined with a knowledge of physics, human anatomy, physiology, and pathology, all of which are essential to obtaining high quality sonographic images.

Graduates may be eligible to apply to the American Registry of Diagnostic Medical Sonographers for examinations in physics, cardiovascular physics, vascular physics, and adult echocardiography. Graduates may find employment in hospitals, physicians' offices, mobile services, and educational institutions.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
BIO	163	Basic Anatomy and Physiology	4	2	0	5
CVS	160	CVS Clinical Education I	0	0	15	5
CVS	161	CVS Clinical Education II	0	0	24	8
CVS	162	CVS Clinical Education III	0	0	15	5
CVS	163	Echo I	3	2	0	4
CVS	164	Echo II	3	2	0	4
CVS	260	CVS Clinical Education IV	0	0	24	8
CVS	261	CVS Clinical Education V	0	0	24	8
CVS	277	Cardiovascular Topics	2	0	0	2
SON	110	Introduction to Sonography	1	3	3	3
SON	111	Sonographic Physics	3	3	0	4
SON	225	Case Studies	0	3	0	1
SON	250	Vascular Sonography	1	3	0	2
<b>TOTALS</b>			<b>17</b>	<b>18</b>	<b>105</b>	<b>59</b>
<b>GENERAL EDUCATION COURSES</b>						
ENG	111	Expository Writing	3	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	3
HUM	115	Critical Thinking	3	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	3

PSY 150	General Psychology	3	0	0	3
<b>TOTALS</b>		<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>		<b>32</b>	<b>20</b>	<b>105</b>	<b>75</b>
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Students entering Cardiovascular Sonography must hold a current CPR certification by the American Heart Association Level C or American Red Cross.

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program is accredited by the Commission on the Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the Joint Review Committee on Education in Diagnostic Medical Sonography.

This program has a certificate option. Contact the program director for specific requirements.

The medical advisor for this program is William S. Trough, M.D.

## CARPENTRY (D35180)

The Carpentry curriculum is designed to train students to construct residential structures using standard building materials and hand and power tools. Carpentry skills and a general knowledge of residential construction will also be taught.

Course work includes footings and foundations, framing, interior and exterior trim, cabinetry, blueprint reading, residential planning and estimating, and other related topics. Students will develop skills through hands-on participation.

Graduates should qualify for employment in the residential building construction field as rough carpenters, framing carpenters, roofers, maintenance carpenters, and other related job titles.

### Course and Hour Requirements

		<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>					
BPR 130	Blueprint Reading/ Construction	1	2	0	2
CAR 111	Carpentry I	4	15	0	9
CAR 112	Carpentry II	4	15	0	9
CAR 113	Carpentry III	3	9	0	6
CAR 114	Residential Building Codes	3	0	0	3
CAR 115	Residential Planning/Estimating	3	0	0	3
CIS 113	Computer Basics	0	2	0	1
DFT 117	Technical Drafting	1	2	0	2
	<b>TOTALS</b>	<b>19</b>	<b>45</b>	<b>0</b>	<b>35</b>
<b>GENERAL EDUCATION COURSES</b>					
ENG 102	Applied Communications II	3	0	0	3
MAT 101	Applied Mathematics I	2	2	0	3
	<b>TOTALS</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>6</b>
<b>FOUNDATION COURSES</b>					
ACA 111	College Student Success	1	0	0	1
<b>TOTAL CREDITS FOR DIPLOMA</b>		<b>25</b>	<b>47</b>	<b>0</b>	<b>42</b>

Students enrolled full-time and making satisfactory progress should complete this program in three semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

## COMPUTED TOMOGRAPHY AND MAGNETIC RESONANCE IMAGING TECHNOLOGY (D45200)

The Computed Tomography and Magnetic Resonance Imaging Technology curriculum, a specialty for radiographers, prepares the individual to use specialized equipment to visualize cross-sectional anatomical structures and aid physicians in the demonstration of pathologies and disease processes. *Individuals entering this curriculum must be registered or registry eligible radiologic technologists by the ARRT.*

Course work prepares the technologist to provide patient care and perform studies utilizing imaging equipment, professional communication, and quality assurance in scheduled and emergency procedures through academic and clinical studies.

Graduates may be eligible to sit for the American Registry of Radiologic Technologist Advanced-Level testing in Computed Tomography and/or Magnetic Resonance Imaging examinations. They may find employment in facilities which perform these imaging procedures.

### Course and Hour Requirements

		<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>					
CAT 210	CT Physics and Equipment	3	0	0	3
CAT 211	CT Procedures	4	0	0	4
CAT 231	CT Clinical Practicum	0	0	33	11
CAT 240	Computed Tomography Topics	2	0	0	2
OR					
MRI 240	Quality Assurance				
MRI 210	MRI Physics and Equipment	3	0	0	3
MRI 211	MRI Procedures	4	0	0	4
MRI 231	MRI Clinical Practicum	0	0	33	11
	<b>TOTALS</b>	<b>16</b>	<b>0</b>	<b>66</b>	<b>38</b>
<b>GENERAL EDUCATION COURSES</b>					
ENG 111	Expository Writing	3	0	0	3
HUM 115	Critical Thinking	3	0	0	3
	<b>TOTALS</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>
<b>FOUNDATION COURSES</b>					
ACA 111	College Student Success	1	0	0	1
<b>TOTAL CREDITS FOR DIPLOMA</b>		<b>23</b>	<b>0</b>	<b>66</b>	<b>45</b>

Students enrolled full-time and making satisfactory progress should complete this program in three semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

The Computed Tomography and Magnetic Resonance Imaging Technology curriculum is accredited by the Joint Review Committee on Education in Radiography.

This program has certificate options. Contact the program director for specific requirements.

The medical advisor for this program is Julian W. Vainright, M.D.

## **COSMETOLOGY**

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and as skin/nail specialists, platform artists, and related businesses.

At the time of publication, this program is still under design by the North Carolina Community College System. Students interested in this program should indicate their interest during the admission process for referral to the Office of the Business Division.

## CRIMINAL JUSTICE TECHNOLOGY (A55180)

The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

### Course and Hour Requirements

					Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>								
CJC	111	Introduction to Criminal Justice	3	0	0	3		
CJC	112	Criminology	3	0	0	3		
CJC	113	Juvenile Justice	3	0	0	3		
CJC	120	Interviews/Interrogations	1	2	0	2		
CJC	131	Criminal Law	3	0	0	3		
CJC	212	Ethics and Community Relations	3	0	0	3		
CJC	213	Substance Abuse	3	0	0	3		
CJC	215	Organization and Administration	3	0	0	3		
CJC	221	Investigative Principles	3	2	0	4		
CJC	231	Constitutional Law	3	0	0	3		
CJC	241	Community-Based Corrections	3	0	0	3		
PSY	115	Stress Management	2	0	0	2		
<b>TOTALS</b>			<b>33</b>	<b>4</b>	<b>0</b>	<b>35</b>		

*Students interested in pursuing Law Enforcement should select these courses*

CJC	114	Investigative Photography	1	2	0	2		
CJC	121	Law Enforcement Operations	3	0	0	3		
CJC	122	Community Policing	3	0	0	3		
CJC	132	Court Procedure and Evidence	3	0	0	3		
CJC	222	Criminalistics	3	0	0	3		

CJC 223	Organized Crime	3	0	0	3
<b>TOTALS</b>		<b>16</b>	<b>2</b>	<b>0</b>	<b>17</b>

**OR**

***Students interested in pursuing Corrections should select these courses***

CJC 141	Corrections	3	0	0	3
CJC 211	Counseling	3	0	0	3
CJC 233	Correctional Law	3	0	0	3
PSY 150	General Psychology	3	0	0	3
PSY 281	Abnormal Psychology	3	0	0	3
SOC 242	Sociology of Deviance	3	0	0	3
<b>TOTALS</b>		<b>18</b>	<b>0</b>	<b>0</b>	<b>18</b>

#### **GENERAL EDUCATION COURSES**

ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
MAT 115	Mathematical Models	2	2	0	3
POL 130	State and Local Government	3	0	0	3
SOC 210	Introduction to Sociology	3	0	0	3
SPA 111	Elementary Spanish I	3	0	0	3
<b>TOTALS</b>		<b>17</b>	<b>2</b>	<b>0</b>	<b>18</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
CIS 110	Introduction to Computers	2	2	0	3
<b>TOTALS</b>		<b>3</b>	<b>2</b>	<b>0</b>	<b>4</b>

<b>TOTALS CREDITS FOR AAS DEGREE</b>		<b>69/</b>	<b>8/</b>	<b>0</b>	<b>74/</b>
		<b>71</b>	<b>10</b>	<b>0</b>	<b>75</b>

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

## EARLY CHILDHOOD ASSOCIATE (A55220)

The Early Childhood Associate curriculum prepares individuals to work with children from infancy through middle childhood in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with parents and children. Students will foster the cognitive/language, physical/motor, social/emotional and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
COE 111	Co-op Work Experience I	0	0	10	1
COE 115	Work Experience Seminar I	1	0	0	1
COE 121	Co-op Work Experience II	0	0	10	1
COE 125	Work Experience Seminar II	1	0	0	1
COE 132	Co-op Work Experience III	0	0	20	2
COE 135	Work Experience Seminar III	1	0	0	1
+EDU 119	Early Childhood Education	3	2	0	4
EDU 131	Child, Family, and Community	3	0	0	3
EDU 146	Child Guidance	3	0	0	3
EDU 151	Creative Activities	3	0	0	3
EDU 151A	Creative Activities Lab	0	2	0	1
EDU 153	Health, Safety, and Nutrition	3	0	0	3
EDU 188	Issues in Early Childhood Education	2	0	0	2
EDU 221	Children with Special Needs	3	0	0	3
EDU 234	Infants, Toddlers, and Twos	3	0	0	3
EDU 251	Exploration Activities	3	0	0	3
EDU 251A	Exploration Activities Lab	0	2	0	1
EDU 259	Curriculum Planning	3	0	0	3
EDU 261	Early Childhood Administration I	2	0	0	2
EDU 282	Early Childhood Literature	3	0	0	3

PSY 244	Child Development I	3	0	0	3
PSY 245	Child Development II	3	0	0	3
<b>TOTALS</b>		<b>44</b>	<b>4</b>	<b>40</b>	<b>50</b>

#### **GENERAL EDUCATION COURSES**

ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
MAT 115	Mathematical Models	2	2	0	3
PSY 150	General Psychology	3	0	0	3
SOC 210	Introduction to Sociology	3	0	0	3
*	Humanities/Fine Arts Elective	3	0	0	3
<b>TOTALS</b>		<b>17</b>	<b>2</b>	<b>0</b>	<b>18</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
ACA 120	Career Assessment	1	0	0	1
CIS 113	Computer Basics	0	2	0	1
<b>TOTALS</b>		<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>

<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>63</b>	<b>8</b>	<b>40</b>	<b>71</b>
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\* Recommended Electives

Humanities/Fine Arts Electives:

ART 111; ENG 132; ENG 231; ENG 232; ENG 273; HUM 115; HUM 122;  
MUS 110

+EDU 111 and EDU 112 may be substituted for EDU 119

+EDU 111 and EDU 113 may be substituted for EDU 119

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has a diploma option. Contact the program director for specific requirements.

## ELECTRICAL/ELECTRONICS TECHNOLOGY (A35220)

The Electrical/Electronics Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities.

Training, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, the National Electric Code, and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice assisting in the layout, installation, and maintenance of electrical/electronic systems.

### Course and Hour Requirements

			<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>						
BPR 130	Blueprint Reading/Construction		1	2	0	2
ELC 112	DC/AC Electricity		3	6	0	5
ELC 113	Basic Wiring I		2	6	0	4
ELC 114	Basic Wiring II		2	6	0	4
ELC 115	Industrial Wiring		2	6	0	4
ELC 117	Motors and Controls		2	6	0	4
ELC 118	National Electrical Code		1	2	0	2
ELC 121	Electrical Estimating		1	2	0	2
ELC 125	Diagrams and Schematics		1	2	0	2
ELC 128	Introduction to PLC		2	3	0	3
ELC 213	Instrumentation		3	2	0	4
ELC 228	PLC Applications		2	6	0	4
ELN 133	Digital Electronics		3	3	0	4
ELN 229	Industrial Electronics		2	4	0	4
HYD 110	Hydraulics/Pneumatics I		2	3	0	3
ISC 112	Industrial Safety		2	0	0	2
	<b>TOTALS</b>		<b>31</b>	<b>59</b>	<b>0</b>	<b>53</b>
<b>GENERAL EDUCATION COURSES</b>						
ENG 111	Expository Writing		3	0	0	3
ENG 114	Professional Research and Reporting		3	0	0	3
MAT 115	Mathematical Models		2	2	0	3
*	Humanities/Fine Arts Electives		3	0	0	3

Social/Behavioral  
Sciences Electives

**TOTALS**

3	0	0	3
<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

**FOUNDATION COURSES**

ACA 111 College Student Success  
CIS 130 Survey of Operating Systems

**TOTALS**

1	0	0	1
2	3	0	3
<b>3</b>	<b>3</b>	<b>0</b>	<b>4</b>

**TOTAL CREDITS FOR AAS DEGREE**

<b>48</b>	<b>64</b>	<b>0</b>	<b>72</b>
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\* Recommended Electives

Humanities/Fine Arts Electives:

ART 111; ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211;  
HUM 212; MUS 110; PHI 210; PHI 240; REL 110; REL 211; REL 212

Social/Behavioral Sciences Electives:

PSY 118; PSY 150; SOC 210; SOC 220; SOC 252

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

## ELECTRONIC SERVICING TECHNOLOGY (A50120)

The Electronic Servicing Technology curriculum is designed to provide basic knowledge and skills required in the installation, maintenance, and servicing of electronic components and systems. Men and women will gain entry-level skills necessary for success in an ever-changing high-technology world.

Students will learn to install, maintain, and service components in both consumer and industrial electronic fields. This includes but is not limited to radios, television, audio/video equipment, digital and microprocessor controlled systems, computers, and monitors.

Graduates should qualify for employment in a wide variety of businesses and industries that require electronic servicing technicians. Opportunities exist in areas such as consumer electronic repairs, business systems, and industrial electronic servicing.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
CET	111	Computer Upgrade/Repair I	2	3	0	3
CET	211	Computer Upgrade/Repair II	2	3	0	3
ELC	140	Fundamentals of DC/AC Circuits	5	6	0	7
ELN	140	Semiconductor Devices	4	6	0	6
ELN	141	Digital Fundamentals	4	6	0	6
ELN	142	Video Systems	7	9	0	10
ELN	229	Industrial Electronics	2	4	0	4
ELN	242	Audio Servicing	2	3	0	3
ELN	243	Communications Electronics	2	3	0	3
ELN	275	Troubleshooting	1	2	0	2
MAT	121	Algebra/Trigonometry I	2	2	0	3
<b>TOTALS</b>			<b>33</b>	<b>47</b>	<b>0</b>	<b>50</b>
<b>GENERAL EDUCATION COURSES</b>						
ENG	111	Expository Writing	3	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	3
MAT	115	Mathematical Models	2	2	0	3
*		Humanities/Fine Arts Electives	3	0	0	3

Social/Behavioral  
Sciences Electives  
**TOTALS**

3	0	0	3
<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

**FOUNDATION COURSES**

ACA 111 College Student Success

1	0	0	1
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CIS 111 Basic PC Literacy

1	2	0	2
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**TOTALS**

<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>
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**TOTAL CREDITS FOR AAS DEGREE**

<b>49</b>	<b>51</b>	<b>0</b>	<b>68</b>
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\* Recommended Electives

Humanities/Fine Arts Electives:

ART 111; ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211;  
HUM 212; HUM 230; MUS 110; PHI 210; PHI 240; REL 110; REL 211;  
REL 212

Social/Behavioral Sciences Electives:

PSY 150; SOC 210

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has certificate and a diploma options. Contact the program director for specific requirements.

## ELECTRONICS ENGINEERING TECHNOLOGY (A40200)

The Electronics Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems.

A broad-based core of courses, including basic electricity, solid-state fundamentals, digital concepts, and microprocessors, ensures the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to analyze and troubleshoot electronic systems.

Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
ATR 213	Programmable Controllers	3	3	0	4
CET 111	Computer Upgrade/Repair I	2	3	0	3
DFT 117	Technical Drafting	1	2	0	2
ELC 131	DC/AC Circuit Analysis	4	3	0	5
ELN 131	Electronic Devices	3	3	0	4
ELN 132	Linear IC Applications	3	3	0	4
ELN 133	Digital Electronics	3	3	0	4
ELN 229	Industrial Electronics	2	4	0	4
ELN 232	Introduction to Microprocessors	3	3	0	4
ELN 234	Communications Systems	3	3	0	4
ELN 235	Data Communications Systems	3	3	0	4
ELN 275	Troubleshooting	1	2	0	2
MAT 122	Algebra/Trigonometry II	2	2	0	3
MAT 223	Applied Calculus	2	2	0	3
PHY 131	Physics-Mechanics	3	2	0	4
<b>TOTALS</b>		<b>38</b>	<b>41</b>	<b>0</b>	<b>54</b>
<b>GENERAL EDUCATION</b>					
ENG 111	Expository Writing	3	0	0	3

ENG 114	Professional Research and Reporting	3	0	0	3
MAT 121	Algebra/Trigonometry I	2	2	0	3
*	Humanities/Fine Arts Electives	3	0	0	3
	Social/Behavioral Sciences Electives	3	0	0	3
	<b>TOTALS</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

#### FOUNDATION COURSES

ACA 111	College Student Success	1	0	0	1
CIS 111	Basic PC Literacy	1	2	0	2
	<b>TOTALS</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>

<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>54</b>	<b>45</b>	<b>0</b>	<b>72</b>
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#### \* Recommended Electives

##### Humanities/Fine Arts Electives:

ART 111; ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211;  
HUM 212; HUM 230; MUS 110; PHI 210; PHI 240; REL 110; REL 211; REL  
212

##### Social/Behavioral Sciences Electives:

PSY 150; SOC 210

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has certificate options. Contact the program director for specific requirements.

## GENERAL OCCUPATIONAL TECHNOLOGY (A55280)

The General Occupational Technology curriculum provides individuals with an opportunity to upgrade their skills and to earn an associate degree by taking courses suited for their occupational interests and/or needs.

The curriculum content will be individualized for students according to their occupational interests and needs. A program of study for each student will be selected from associate degree-level courses offered by the College.

Graduates will become more effective workers, better qualified for advancements within their field of employment, and become qualified for a wide range of entry-level employment opportunities.

### Course and Hour Requirements

Class	Lab	Clin/ WExp	Credit Hours
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#### MAJOR COURSES

Select 18 SHC from a combination of core courses for curriculums approved to be offered by the college.

Select from prefixes for major courses for curriculums approved to be offered by the college.

#### GENERAL EDUCATION COURSES

Students take a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics; and a minimum of 6 semester hours of communications.

MINIMUM MAJOR COURSE HOURS	49
MINIMUM GENERAL EDUCATION HOURS	15
MINIMUM FOUNDATION COURSES	1

ACA 111 College Student Success	1
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TOTAL HOURS FOR AAS DEGREE	65-76
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## HEALTH INFORMATION TECHNOLOGY (A45360)

The Health Information Technology curriculum provides individuals with the knowledge and skills to process, analyze, abstract, compile, maintain, manage, and report health information.

Students will supervise departmental functions; classify, code and index diagnoses and procedures; coordinate information for cost control, quality management, statistics, marketing, and planning; monitor governmental and non-governmental standards; facilitate research; and design system controls to monitor patient information security.

Graduates of this program may be eligible to write the national certification examination to become an Accredited Record Technician (ART). Employment opportunities include hospitals, rehabilitation facilities, nursing homes, health insurance organizations, out-patient clinics, physicians' offices, hospice, and mental health facilities.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Cred Hour
<b>MAJOR COURSES</b>						
BIO	168	Anatomy and Physiology I	3	3	0	4
BIO	169	Anatomy and Physiology II	3	3	0	4
BIO	175	General Microbiology	2	2	0	3
HIT	110	Health Information Orientation	2	0	0	2
HIT	112	Health Law and Ethics	3	0	0	3
HIT	114	Record Systems/Standards	2	3	0	3
HIT	122	Directed Practice I	0	0	3	1
HIT	210	Health Care Statistics	3	2	0	4
HIT	212	Coding/Classification I	3	3	0	4
HIT	214	Coding/Classification II	3	3	0	4
HIT	216	Quality Management	2	2	0	3
HIT	218	Management	3	0	0	3
HIT	220	Computers in Health Care	1	2	0	2
HIT	222	Directed Practice III	0	0	6	2
HIT	224	Directed Practice IV	1	0	6	3
HIT	226	Principles of Disease	3	0	0	3
HIT	280	Professional Issues	2	0	0	2
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3
OST	284	Emerging Technologies	2	0	0	2
<b>TOTALS</b>			<b>44</b>	<b>23</b>	<b>15</b>	<b>58</b>

**GENERAL EDUCATION COURSES**

ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
HUM 230	Leadership Development	3	0	0	3
MAT 110	Mathematical Measurement	2	2	0	3
PSY 150	General Psychology	3	0	0	3
<b>TOTALS</b>		<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

**FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
CIS 111	Basic PC Literacy	1	2	0	2
<b>TOTALS</b>		<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>

<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>60</b>	<b>27</b>	<b>15</b>	<b>76</b>
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Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program is accredited by the Commission on the Accreditation of Allied Health Educational Programs (CAAHEP) in cooperation with the American Health Information Management Association's Council on Accreditation.

## HEALTH UNIT COORDINATOR (C25220)

The Health Unit Coordinator curriculum prepares the individual to perform routine clerical and receptionist tasks in an inpatient or outpatient health care facility. The Health Unit Coordinator organizes the activities for the unit and manages nonclinical functions to enhance the delivery of health care.

The course work includes material management of the unit; transcription of the health care teams' orders; health record management; interdepartmental and interpersonal communication techniques; significance of confidentiality of the health records data; and organizational skills and prioritization of tasks.

Graduates should qualify for entry-level clerical and receptionist positions in hospitals, long-term care facilities, and other health care agencies.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Cred Hours
<b>MAJOR COURSES</b>					
HUC 101	HUC Theory and Practice	8	0	8	12
OST 103	Basic Medical Terminology	3	0	0	3
PSY 102	Human Relations	2	0	0	2
<b>TOTALS</b>		<b>13</b>	<b>0</b>	<b>8</b>	<b>17</b>
<b>FOUNDATION COURSES</b>					
ACA 111	College Student Success	1	0	0	1
<b>TOTAL CREDITS FOR CERTIFICATE</b>		<b>14</b>	<b>0</b>	<b>8</b>	<b>18</b>

Students making satisfactory progress should complete this program in one semester.

## HEALTHCARE MANAGEMENT TECHNOLOGY (A25200)

The Healthcare Management Technology curriculum is designed to prepare students for employment in healthcare business and financial operations. Students will gain a comprehensive understanding of the application of management principles to the healthcare environment.

The curriculum places emphasis on planning, organizing, directing, and controlling tasks related to healthcare organizational objectives including the legal and ethical environment. Emphasis is placed on the development of effective communication, managerial, and supervisory skills.

Graduates may find employment in healthcare settings including hospitals, medical offices, clinics, long-term care facilities, and insurance companies. Graduates are eligible to sit for the Certified Patient Account Manager (CPAM) and the Certified Manager of Patient Accounts (CMPA).

### Course and Hour Requirements

		<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>					
ACC 120	Principles of Accounting I	3	2	0	4
ACC 121	Principles of Accounting II	3	2	0	4
ACC 225	Cost Accounting	3	0	0	3
BUS 137	Principles of Management	3	0	0	3
HMT 110	Introduction to Healthcare Management	3	0	0	3
HMT 210	Medical Insurance	3	0	0	3
HMT 211	Long-Term Care Administration	3	0	0	3
HMT 220	Healthcare Financial Management	4	0	0	4
MED 118	Medical Law and Ethics	2	0	0	2
MED 121	Medical Terminology I	3	0	0	3
MED 122	Medical Terminology II	3	0	0	3
*	Major Course Electives	15/16	6	20	20/21
<b>TOTALS</b>		<b>48/49</b>	<b>6</b>	<b>20</b>	<b>55/56</b>

### GENERAL EDUCATION COURSES

COM 231	Public Speaking	3	0	0	3
ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
HUM 115	Critical Thinking	3	0	0	3
MAT 161	College Algebra	3	0	0	3

MAT 161A	College Algebra Lab	0	2	0	1
PSY 150	General Psychology	3	0	0	3
<b>TOTALS</b>		<b>18</b>	<b>2</b>	<b>0</b>	<b>19</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>66/67</b>	<b>12</b>	<b>20</b>	<b>75/76</b>
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#### **\* Recommended Electives**

##### **Major Course Electives:**

BUS 110; BUS 153; BUS 228; CIS 111; CIS 120; COE 112; COE 115; HMT 212; OST 284

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has certificate and diploma options. Contact the program director for specific requirements.

## HUMAN SERVICES TECHNOLOGY (A45380)

The Human Services Technology curriculum prepares students for entry-level positions in institutions and agencies which provide social, community, and educational services. Along with core courses, students take courses which prepare them for specialization in specific human service areas.

Students will take courses from a variety of disciplines. Emphasis in core courses is placed on development of relevant knowledge, skills, and attitudes in human services. Fieldwork experience will provide opportunities for application of knowledge and skills learned in the classroom.

Graduates should qualify for positions in mental health, child care, family services, social services, rehabilitation, correction, and educational agencies. Graduates choosing to continue their education may select from a variety of transfer programs at senior public and private institutions.

### Course and Hour Requirements

	Class	Lab	Clin/ WExp	Credit Hours
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#### MAJOR COURSES

GRO 120	Gerontology	3	0	0	3
HSE 110	Introduction to Human Services	2	2	0	3
HSE 112	Group Process I	1	2	0	2
HSE 123	Interviewing Techniques	2	2	0	3
HSE 125	Counseling	2	2	0	3
HSE 135	Orientation Lab I	0	2	0	1
HSE 160	HSE Clinical Supervision I	1	0	0	1
HSE 163	HSE Clinical Experience I	0	0	9	3
HSE 210	Human Services Issues	2	0	0	2
HSE 212	Group Process II	1	2	0	2
HSE 215	Health Care I	3	2	3	5
HSE 225	Crisis Intervention	3	0	0	3
HSE 235	Orientation Lab II	0	2	0	1
HSE 260	HSE Clinical Supervision II	1	0	0	1
HSE 264	HSE Clinical Experience II	0	0	12	4
PSY 150	General Psychology	3	0	0	3
PSY 255	Introduction to Exceptionality	3	0	0	3
PSY 265	Behavior Modification	3	0	0	3
PSY 281	Abnormal Psychology	3	0	0	3
SAB 130	Addictive Behaviors	3	0	0	3

SOC 213	Sociology of the Family	3	0	0	3
*	HSE Elective	-	-	-	2/3
	<b>TOTALS</b>	-	-	-	<b>57/58</b>

#### **GENERAL EDUCATION COURSES**

BIO 161	Introduction to Human Biology	3	0	0	3
ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
HUM 115	Critical Thinking	3	0	0	3
PSY 241	Developmental Psychology	3	0	0	3
	<b>TOTALS</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>15</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
CIS 113	Computer Basics	0	2	0	1
	<b>TOTALS</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>2</b>

<b>TOTAL CREDITS FOR AAS DEGREE</b>	-	-	-	<b>74/75</b>
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\* Recommended Electives

HSE Electives:

CIS 111; HSC 110; HSC 120; HSC 130; HSE 130; HSE 230; HSE 251; HSE 270; HSE 272

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has program approval by Council for Standards in Human Services Education.

This program has a diploma option. Contact the program director for specific requirements.

## INDUSTRIAL CONSTRUCTION TECHNOLOGY (A35260)

The Industrial Construction Technology curriculum is designed to prepare students for a diversity of jobs in the industrial construction industry, in construction craft skills as well as in supervisory and technical support roles.

A wide range of technical courses are offered in the mechanical and electrical areas such as machine processes, piping, electricity, drafting, mechanical installation, and other related topics. Second-year students may select from advanced topics in their area of interest.

Graduates should qualify for employment as skilled craftsmen or technicians with either industrial or construction firms.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
BPR	111	Blueprint Reading	1	2	0	2
BPR	130	Blueprint Reading/Construction	1	2	0	2
BPR	135	Schematics and Diagrams	2	0	0	2
CIS	111	Basic PC Literacy	1	2	0	2
COE	112	Co-op Work Experience I	0	0	20	2
		OR				
MEC	175	Equipment Installation	0	6	0	2
DFT	117	Technical Drafting	1	2	0	2
DFT	119	Basic CAD	1	2	0	2
ELC	112	DC/AC Electricity	3	6	0	5
ISC	112	Industrial Safety	2	0	0	2
MEC	111	Machine Processes I	2	3	0	3
MEC	142	Physical Metallurgy	1	2	0	2
MNT	220	Rigging and Moving	1	3	0	2
PFT	111	Piping and Valves	3	3	0	4
WLD	112	Basic Welding Processes	1	3	0	2
*		Major Course Electives	-	-	-	18/19
		<b>TOTALS</b>	-	-	-	<b>52/53</b>
<b>GENERAL EDUCATION COURSES</b>						
ENG	111	Expository Writing	3	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	3
*		Humanities/Fine Arts Electives	3	0	0	3

Social/Behavioral  
Sciences Electives  
**TOTALS**

<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

**FOUNDATION COURSES**

ACA 111 College Student Success	1	0	0	1
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**TOTAL CREDITS FOR AAS DEGREE**

-	-	-	<b>68/69</b>
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\* Recommended Electives

Major Course Electives:

BUS 135; COE 115; ELC 113; ELC 117; ELC 118; ELC 128; ELN 229; ELN 231; HYD 110; MEC 130; MEC 165; MEC 240

Humanities/Fine Arts Electives:

ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211; PHI 240

Social/Behavioral Sciences Electives:

PSY 118; PSY 150; SOC 210; SOC 213; SOC 220

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

## INDUSTRIAL CONSTRUCTION TECHNOLOGY/ELECTRICAL (A3526A)

Electrical is a concentration under the curriculum title of Industrial Construction Technology. This curriculum is designed to prepare students for a diversity of jobs in the industrial construction industry as well as in supervisory and technical support roles.

A wide range of technical courses is offered in the mechanical and electrical areas such as machine processes, piping, electricity, drafting, mechanical installation, and other related topics. Second-year students concentrate on industrial, electrical, and instrumentation topics.

Graduates should qualify for employment as skilled craftsmen or technicians with either industrial or construction firms.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
BPR 111	Blueprint Reading	1	2	0	2
BPR 130	Blueprint Reading/Construction	1	2	0	2
BPR 135	Schematics and Diagrams	2	0	0	2
BUS 135	Principles of Supervision	3	0	0	3
COE 112	Co-op Work Experience I	0	0	20	2
OR					
MEC 175	Equipment Installation	0	6	0	2
DFT 117	Technical Drafting	1	2	0	2
DFT 119	Basic CAD	1	2	0	2
ELC 112	DC/AC Electricity	3	6	0	5
ELC 113	Basic Wiring I	2	6	0	4
ELC 240	Heavy Construction Wiring	2	6	0	4
ELC 241	Electrical System Commissioning	2	3	0	3
HYD 110	Hydraulics/Pneumatics I	2	2	0	3
ISC 112	Industrial Safety	2	0	0	2
MEC 111	Machine Processes I	2	3	0	3
MEC 142	Physical Metallurgy	1	2	0	2
MNT 220	Rigging and Moving	1	3	0	2
PFT 111	Piping and Valves	3	3	0	4
WLD 112	Basic Welding Processes	1	3	0	2
*	Major Course Electives	-	-	-	7/8
<b>TOTALS</b>		-	-	-	<b>56/57</b>
<b>GENERAL EDUCATION COURSES</b>					
ENG 111	Expository Writing	3	0	0	3

ENG 114	Professional Research and Reporting	3	0	0	3
MAT 121	Algebra/Trigonometry I	2	2	0	3
*	Humanities/Fine Arts Elective	3	0	0	3
	Social/Behavioral Sciences Elective	3	0	0	3
	<b>TOTALS</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

#### FOUNDATION COURSES

ACA 111	College Student Success	1	0	0	1
CIS 111	Basic PC Literacy	1	2	0	2
	<b>TOTALS</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>

<b>TOTAL CREDITS FOR AAS DEGREE</b>	-	-	-	<b>74/75</b>
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#### \* Recommended Electives

##### Major Course Electives:

COE 115; ELC 117; ELC 118; ELC 128; ELC 131; ELN 229; ELN 231

##### Humanities/Fine Arts Electives:

ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211; PHI 240

##### Social/Behavioral Sciences Electives:

PSY 118; PSY 150; SOC 210; SOC 213; SOC 220

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

**INDUSTRIAL CONSTRUCTION TECHNOLOGY/MECHANICAL (A3526B)**

Mechanical is a concentration under the curriculum title of Industrial Construction Technology. This curriculum is designed to prepare students for a diversity of jobs in the industrial construction industry as well as in supervisory and technical support roles.

A wide range of technical courses is offered in the mechanical and electrical areas such as machine processes, piping, electricity, drafting, mechanical installation, and other related topics. Second-year students concentrate on industrial mechanical systems.

Graduates should qualify for employment as skilled craftsmen or technicians with either industrial or construction firms.

**Course and Hour Requirements**

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
BPR	130	Blueprint Reading/Construction	1	2	0	2
BPR	135	Schematics and Diagrams	2	0	0	2
BUS	135	Principles of Supervision	3	0	0	3
COE	112	Co-op Work Experience I	0	0	20	2
OR						
MEC	175	Equipment Installation	0	6	0	2
HYD	110	Hydraulics/Pneumatics I	2	2	0	3
ISC	112	Industrial Safety	2	0	0	2
MEC	111	Machine Processes I	2	3	0	3
MEC	240	Mechanical Installation I	1	6	0	3
MEC	241	Mechanical Installation II	1	6	0	3
MNT	220	Rigging and Moving	1	3	0	2
PFT	111	Piping and Valves	3	3	0	4
PFT	211	Piping Systems Installation	3	3	0	4
PFT	212	Piping Systems Maintenance and Repair	2	3	0	3
Major Course Electives			-	-	-	20/21
<b>TOTALS</b>			-	-	-	<b>56/57</b>
<b>GENERAL EDUCATION COURSES</b>						
ENG	111	Expository Writing	3	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	3
Humanities/Fine Arts Elective			3	0	0	3

Social/Behavioral  
Sciences Elective  
**TOTALS**

3	0	0	3
<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

**FOUNDATION COURSES**

ACA 111 College Student Success  
CIS 111 Basic PC Literacy  
**TOTALS**

1	0	0	1
1	2	0	2
<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>

**TOTAL CREDITS FOR AAS DEGREE**

-	-	-	<b>74/75</b>
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\* Recommended Electives

Major Course Electives:

BPR 111; COE 115; DFT 117; DFT 119; ELC 112; MEC 130; MEC 142; MEC 165; WLD 112

Humanities/Fine Arts Electives:

ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211; PHI 240

Social/Behavioral Sciences Electives:

PSY 118; PSY 150; SOC 210; SOC 213; SOC 220

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

## INDUSTRIAL MAINTENANCE TECHNOLOGY (A50240)

The Industrial Maintenance Technology curriculum is designed to prepare or upgrade individuals to service, maintain, repair, or install equipment for a wide range of industries. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial equipment and physical facilities.

Students will learn technical skills in blueprint reading, electricity, hydraulics/pneumatics, machining, welding, and various maintenance procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of any of the various levels of this curriculum, graduates should gain the necessary practical skills and related technical information to qualify for employment or advancement in the various areas of industrial maintenance technology.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
AHR 110	Introduction to Refrigeration	2	6	0	5
AHR 120	HVACR Maintenance	1	3	0	2
BPR 111	Blueprint Reading	1	2	0	2
BPR 130	Blueprint Reading/Construction	1	2	0	2
BPR 135	Schematics and Diagrams	2	0	0	2
ELC 112	DC/AC Electricity	3	6	0	5
ELC 117	Motors and Controls	2	6	0	4
ELC 128	Introduction to PLC	2	3	0	3
ELC 228	PLC Applications	2	6	0	4
HYD 110	Hydraulics/Pneumatics I	2	3	0	3
ISC 112	Industrial Safety	2	0	0	2
MEC 111	Machine Processes I	2	3	0	3
MEC 112	Machine Processes II	2	3	0	3
MNT 110	Introduction to Maintenance Procedures	1	3	0	2
MNT 111	Maintenance Practices	1	3	0	2
MNT 220	Rigging and Moving	1	3	0	2
MNT 230	Pumps and Piping Systems	1	3	0	2
MNT 240	Industrial Equipment Troubleshooting	1	3	0	2
VLD 112	Basic Welding Processes	1	3	0	2
<b>TOTALS</b>		<b>30</b>	<b>61</b>	<b>0</b>	<b>52</b>

**GENERAL EDUCATION COURSES**

ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
MAT 115	Mathematical Models	2	2	0	3
*	Humanities/Fine Arts Elective	3	0	0	3
	Social/Behavioral Sciences Elective	3	0	0	3
	<b>TOTALS</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

**FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
CIS 111	Basic PC Literacy	1	2	0	2
	<b>TOTALS</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>

<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>46</b>	<b>65</b>	<b>0</b>	<b>70</b>
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\* Recommended Electives

Humanities/Fine Arts Electives:

ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211; PHI 240

Social/Behavioral Sciences Electives:

PSY 118; PSY 150; SOC 210; SOC 213; SOC 220

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, Math or Science.

This program has certificate and diploma options. Contact the program director for specific requirements.

## INDUSTRIAL MANAGEMENT TECHNOLOGY (A50260)

The Industrial Management Technology curriculum is designed to equip students with the knowledge, skills, and abilities to function effectively in staff, front-line leadership, and mid-level management positions in organizations. The program emphasizes team building, TQM, SPC, motivation, continuous improvement, systems, and leadership.

Course work includes the integrated study of quality and productivity improvement, production operations, management, financial analysis, problem solving, and management of resources—human, physical, and information. Course work incorporates a broad understanding of computer applications to analyze and solve problems.

Graduates should qualify for entry-level positions such as front-line supervisor, engineering assistant, production planner, inventory supervisor, or as a quality control technician. With additional training and experience, graduates could become plant or production managers.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
ACC 120	Principles of Accounting I	3	2	0	4
BUS 135	Principles of Supervision	3	0	0	3
BUS 217	Employment Law and Regulations	3	0	0	3
BUS 235	Performance Management	3	0	0	3
DFT 117	Technical Drafting	1	2	0	2
DFT 119	Basic CAD	1	2	0	2
ISC 112	Industrial Safety	2	0	0	2
ISC 132	Manufacturing Quality Control	2	3	0	3
ISC 133	Manufacturing Management Practices	2	0	0	2
ISC 135	Principles of Industrial Management	3	0	0	3
ISC 136	Productivity Analysis I	2	3	0	3
ISC 140	Material and Capacity Planning	3	0	0	3
ISC 141	Production Activity Control	3	0	0	3
ISC 142	Inventory Management	3	0	0	3
ISC 221	Statistical Quality Control	3	0	0	3
ISC 233	Industrial Organization and Management	3	0	0	3
MEC 111	Machine Processes I	2	3	0	3
OMT 132	ISO 9000 Standards	3	0	0	3

OMT 133	ISO 9000 Internal Auditor	3	0	0	3
<b>TOTALS</b>		<b>48</b>	<b>15</b>	<b>0</b>	<b>54</b>

### **GENERAL EDUCATION COURSES**

ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
MAT 115	Mathematical Models	2	2	0	3
*	Humanities/Fine Arts Electives	3	0	0	3
	Social/Behavioral Sciences Electives	3	0	0	3
<b>TOTALS</b>		<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
CIS 111	Basic PC Literacy	1	2	0	2
<b>TOTALS</b>		<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>

<b>TOTAL CREDITS FOR AAS DEGREE</b>		<b>64</b>	<b>19</b>	<b>0</b>	<b>72</b>
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\* Recommended Electives

Humanities/Fine Arts Electives:

ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211; PHI 240

Social/Behavioral Sciences:

PSY 118; PSY 150; SOC 210; SOC 213; SOC 220

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

## INFORMATION SYSTEMS (A25260)

The Information Systems curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible program, designed to meet community information systems needs.

Course work includes computer systems terminology and operations, logic, operating systems, database, data communications/networking, and related business topics. Studies will provide experience for students to implement, support, and customize industry-standard information systems.

Graduates should qualify for a wide variety of computer-related, entry-level positions that provide opportunities for advancement with increasing experience and ongoing training. Duties may include systems maintenance and troubleshooting, support and training, and business applications design and implementation.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
BUS	110	Introduction to Business	3	0	0	3
CIS	110	Introduction to Computers	2	2	0	3
CIS	115	Introduction to Programming and Logic	2	2	0	3
CIS	120	Spreadsheet I	2	2	0	3
CIS	130	Survey of Operating Systems	2	3	0	3
CIS	147	Operating System-Windows™	2	2	0	3
CIS	152	Database Concepts and Applications	2	2	0	3
CIS	153	Database Applications	2	2	0	3
CIS	162	Multimedia Presentation Software	2	2	0	3
CIS	165	Desktop Publishing I	2	2	0	3
CIS	170	Technical Support Functions I	2	2	0	3
CIS	172	Introduction to the Internet	2	3	0	3
CIS	215	Hardware Installation and Maintenance	2	3	0	3
CIS	216	Software Installation and Maintenance	1	2	0	2
CIS	226	Trends in Technology	1	2	0	2
CIS	286	Systems Analysis and Design	3	0	0	3
CIS	288	Systems Project	1	4	0	3

COE 111	Co-op Work Experience I	0	0	10	1
&					
COE 115	Work Experience Seminar I	1	0	0	1
OR					
COE 111	Co-op Work Experience I	0	0	10	1
&					
COE 121	Co-op Work Experience II	0	0	10	1
CSC 139	Visual BASIC Programming	2	3	0	3
NET 110	Data Communications/ Networking	2	2	0	3
NET 120	Network Installation and Administration I	2	2	0	3
<b>TOTALS</b>		<b>39/40</b>	<b>42</b>	<b>10/20</b>	<b>60</b>

#### **GENERAL EDUCATION COURSES**

ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
MAT 121	Algebra/Trigonometry I	2	2	0	3
PHI 240	Introduction to Ethics	3	0	0	3
PSY 118	Interpersonal Psychology	3	0	0	3
<b>TOTALS</b>		<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>54/55</b>	<b>44</b>	<b>10/20</b>	<b>76</b>
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Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has a certificate option. Contact the program director for specific requirements.

## INFORMATION SYSTEMS/NETWORKING ADMINISTRATION AND SUPPORT (A2526D)

Network Administration and Support is a concentration under the curriculum title of Information Systems. This curriculum prepares students to install and support networks and develops strong analytical skills and extensive computer knowledge.

Course work includes extensive hands-on experience with networks. Classes cover media types, topologies, and protocols with installation and support of hardware and software, troubleshooting network and computer problems, and administrative responsibilities. Elective choices provide opportunity for specialization.

Graduates should qualify for positions such as LAN/PC administrator, microcomputer support specialist, network control operator, communications technician/analyst, network/computer consultant, and information systems specialist. Graduates should be prepared to sit for certification exams which can result in industry-recognized credentials.

### Course and Hour Requirements

			<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>						
BUS	110	Introduction to Business	3	0	0	3
CIS	110	Introduction to Computers	2	2	0	3
CIS	115	Introduction to Programming and Logic	2	2	0	3
CIS	130	Survey of Operating Systems	2	3	0	3
CIS	148	Operating Systems - Windows™ NT	2	2	0	3
CIS	152	Database Concepts and Applications	2	2	0	3
CIS	172	Introduction to the Internet	2	3	0	3
CIS	173	Network Theory	2	2	0	3
CIS	174	Network System Manager I	2	2	0	3
CIS	175	Network Management I	2	2	0	3
CIS	215	Hardware Installation and Maintenance	2	3	0	3
CIS	246	Operating Systems - UNIX	2	3	0	3
CIS	274	Network System Manager II	2	2	0	3
CIS	275	Network Management II	2	2	0	3
CIS	279	UNIX Systems Administration	3	3	0	4
OR						
CSC	248	Advanced Internet Programming	2	3	0	3
CIS	282	Network Technology	3	0	0	3

CIS 287	Network Support	2	2	0	3
COE 111	Co-op Work Experience I	0	0	10	1
&					
COE 115	Work Experience Seminar I	1	0	0	1
OR					
COE 111	Co-op Work Experience I	0	0	10	1
&					
COE 121	Co-op Work Experience II	0	0	10	1
CSC 134	C++ Programming	2	3	0	3
NET 110	Data Communications/ Networking	2	2	0	3
<b>TOTALS</b>		<b>40/41</b>	<b>40</b>	<b>10/20</b>	<b>59/60</b>

#### **GENERAL EDUCATION COURSES**

ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
MAT 121	Algebra/Trigonometry I	2	2	0	3
PHI 240	Introduction to Ethics	3	0	0	3
PSY 118	Interpersonal Psychology	3	0	0	3
<b>TOTALS</b>		<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>55/56</b>	<b>42</b>	<b>10/20</b>	<b>75/76</b>
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Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has a certificate option. Contact the program director for specific requirements.

## INFORMATION SYSTEMS/PROGRAMMING (A2526E)

Programming is a concentration under the curriculum title of Information Systems. This curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
ACC	115	College Accounting	3	2	0	4
CIS	110	Introduction to Computers	2	2	0	3
CIS	115	Introduction to Programming and Logic	2	2	0	3
CIS	130	Survey of Operating Systems	2	3	0	3
CIS	134	C++ Programming	2	3	0	3
CIS	135	COBOL Programming	2	3	0	3
CIS	138	RPG Programming	2	3	0	3
CIS	139	Visual BASIC Programming	2	3	0	3
CIS	143	Object Oriented Programming	2	3	0	3
CIS	147	Operating System-Windows™	2	2	0	3
CIS	152	Database Concepts and Applications	2	2	0	3
CIS	153	Database Applications	2	2	0	3
CIS	215	Hardware Installation and Maintenance	2	3	0	3
CIS	234	Advanced C++	2	3	0	3
CIS	238	Advanced RPG	2	3	0	3
CIS	239	Advanced Visual BASIC				
CIS	244	Operating System-AS/400	2	3	0	3

CIS 286	Systems Analysis and Design	3	0	0	3
CIS 288	Systems Project	1	4	0	3
COE 111	Co-op Work Experience I	0	0	10	1
&					
COE 115	Work Experience Seminar I	1	0	0	1
OR					
COE 111	Co-op Work Experience I	0	0	10	1
&					
COE 121	Co-op Work Experience II	0	0	10	1
NET 110	Data Communications/ Networking				
		2	2	0	3
	<b>TOTALS</b>	<b>18/19</b>	<b>24</b>	<b>10/20</b>	<b>29</b>

#### GENERAL EDUCATION COURSES

ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
MAT 121	Algebra/Trigonometry I	2	2	0	3
PHI 240	Introduction to Ethics	3	0	0	3
PSY 118	Interpersonal Psychology	3	0	0	3
	<b>TOTALS</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

#### FOUNDATION COURSES

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>54/55</b>	<b>50</b>	<b>10/20</b>	<b>76</b>
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Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

## INSURANCE (C25280)

The Insurance curriculum provides prelicensing education required by the North Carolina Department of Insurance and prepares individuals to enter the insurance profession.

Course work includes the fundamentals of risk and insurance law, life and health insurance, Medicare and long-term care insurance, property and liability insurance, and claims adjusting principles and practices.

Graduates should qualify for North Carolina insurance licensing examinations and be able to provide service to insurance consumers in a competent manner. Employment opportunities include insurance agent, claims adjuster, customer service representative, and special agent.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
INS	101	Life/Accident/Health Insurance	4	0	0	4
INS	102	Medicare Supplements/Long-Term Care	1	0	0	1
INS	103	Property and Casualty Insurance	4	0	0	4
INS	105	Risk Management	3	0	0	3
OR						
INS	107	Claims Adjusting				
INS	108	Income Taxation of Insurance	3	0	0	3
OR						
INS	109	Employee Benefits	2	0	0	2
<b>TOTAL CREDITS FOR CERTIFICATE</b>			<b>14/15</b>	<b>0</b>	<b>0</b>	<b>14/15</b>

Students making satisfactory progress should complete this program in two semesters.

## MACHINING TECHNOLOGY (A50300)

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment, and sophisticated precision inspection instruments.

Students will learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations, and make decisions to ensure that work quality is maintained.

Employment opportunities for machining technicians exist in manufacturing industries, public institutions, governmental agencies, and in a wide range of specialty machining job shops.

### Course and Hour Requirements

			<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>						
BPR	111	Blueprint Reading	1	2	0	2
BPR	121	Blueprint Reading/Mechanical	1	2	0	2
ISC	112	Industrial Safety	2	0	0	2
ISC	221	Statistical Quality Control	3	0	0	3
MAC	111	Machining Technology I	2	12	0	6
MAC	112	Machining Technology II	2	12	0	6
MAC	113	Machining Technology III	2	12	0	6
MAC	114	Introduction to Metrology	2	0	0	2
MAC	122	CNC Turning	1	3	0	2
MAC	124	CNC Milling	1	3	0	2
MAC	151	Machining Calculations	1	2	0	2
MAC	214	Machining Technology IV	2	12	0	6
MAC	215	Machining Technology V	2	12	0	6
MAC	222	Advanced CNC Turning	1	3	0	2
MAC	224	Advanced CNC Milling	1	3	0	2
MEC	110	Introduction to CAD/CAM	1	2	0	2
MEC	142	Physical Metallurgy	1	2	0	2
<b>TOTALS</b>			<b>26</b>	<b>82</b>	<b>0</b>	<b>55</b>
<b>GENERAL EDUCATION COURSES</b>						
ENG	111	Expository Writing	3	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	3
*		Humanities/Fine Arts Electives	3	0	0	3

Social/Behavioral  
Sciences Electives

**TOTALS**

	3	0	0	3
<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>	

**FOUNDATION COURSES**

ACA 111 College Student Success	1	0	0	1
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**TOTAL CREDITS FOR AAS DEGREE**

<b>41</b>	<b>84</b>	<b>0</b>	<b>71</b>	
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\* Recommended Electives

Humanities/Fine Arts Electives:

ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211; PHI 240

Social/Behavioral Sciences Electives:

PSY 118; PSY 150; SOC 210; SOC 213; SOC 220; SOC 252

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has certificate and diploma options. Contact the program director for specific requirements.

## MANUFACTURING ENGINEERING TECHNOLOGY (A40300)

The Manufacturing Engineering Technology curriculum prepares individuals for employment in the fields of manufacturing technology. The curriculum emphasizes the theory and training required to effectively augment manufacturing engineers in industry.

Courses include a background in mechanical and related theory and the use of manufacturing and analytical equipment. Industrial standards such as EPA, OSHA, GD&T, and ISO are discussed. Computer usage for process control and effective communication skills is emphasized.

Graduates of this curriculum qualify for positions as engineering technicians. Some of the responsibilities include drafting, process specification, tooling selection, automation programming, project facilitation, and supervision. Certification is available through organizations such as ASQC, SME, and NICET.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
ATR 281	Automation and Robotics	3	2	0	4
CIS 130	Survey of Operating Systems	2	3	0	3
DFT 117	Technical Drafting	1	2	0	2
DFT 119	Basic CAD	1	2	0	2
ELC 111	Introduction to Electricity	2	2	0	3
HYD 110	Hydraulics/Pneumatics I	2	3	0	3
ISC 112	Industrial Safety	2	0	0	2
ISC 132	Manufacturing Quality Control	2	3	0	3
ISC 216	Work Measurement	3	0	0	3
MAC 122	CNC Turning	1	3	0	2
MAC 124	CNC Milling	1	3	0	2
MAT 122	Algebra/Trigonometry II	2	2	0	3
MEC 111	Machine Processes I	2	3	0	3
MEC 161	Manufacturing Processes I	3	0	0	3
MEC 161A	Manufacturing Processes I Lab	0	3	0	1
MEC 180	Engineering Materials	2	3	0	3
MEC 236	Local/Regional Manufacturing	1	4	0	3
MEC 250	Statics and Strength of Materials	4	3	0	5
PHY 131	Physics-Mechanics	3	2	0	4
<b>TOTALS</b>		<b>37</b>	<b>43</b>	<b>0</b>	<b>54</b>

### GENERAL EDUCATION COURSES

ENG 111	Expository Writing	3	0	0	3
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ENG 114	Professional Research and Reporting	3	0	0	3
MAT 121	Algebra/Trigonometry I	2	2	0	3
SOC 210	Introduction to Sociology	3	0	0	3
*	Humanities/Fine Arts Elective	3	0	0	3
	<b>TOTALS</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>52</b>	<b>45</b>	<b>0</b>	<b>70</b>
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#### **\* Recommended Electives**

##### **Humanities/Fine Arts Electives:**

ENG 231; ENG 232; ENG 241; ENG 242; HUM 115; HUM 211; PHI 240

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has a certificate option. Contact the program director for specific requirements.

## MASONRY (D35280)

The Masonry curriculum is designed to prepare individuals to work in the construction industry as masons. Masonry courses provide principles and fundamentals of masonry and experiences necessary to produce quality construction using safe, practical, and reliable work habits.

Course work includes basic mathematics, blueprint reading, and methods used in laying out masonry jobs for residential, commercial, and industrial construction. Upon completion students will be able to read blueprints, estimate structures, construct footings and walks, and lay masonry units.

Upon completion, students will be issued a certificate or diploma. Graduates should qualify for employment in the masonry industry as apprentices or masons.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credi Hours
<b>MAJOR COURSES</b>					
BPR 130	Blueprint Reading/Construction	1	2	0	2
ISC 115	Construction Safety	2	0	0	2
MAS 110	Masonry I	4	18	0	10
MAS 120	Masonry II	4	18	0	10
MAS 130	Masonry III	6	6	0	8
	<b>TOTALS</b>	<b>17</b>	<b>44</b>	<b>0</b>	<b>32</b>
<b>GENERAL EDUCATION COURSES</b>					
ENG 101	Applied Communications I	3	0	0	3
MAT 101	Applied Mathematics I	2	2	0	3
	<b>TOTALS</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>6</b>
<b>FOUNDATION COURSES</b>					
ACA 111	College Student Success	1	0	0	1
CIS 111	Basic PC Literacy	1	2	0	2
HSC 120	CPR	0	2	0	1
	<b>TOTALS</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>4</b>
<b>TOTAL CREDITS FOR DIPLOMA</b>		<b>24</b>	<b>50</b>	<b>0</b>	<b>42</b>

Students enrolled full-time and making satisfactory progress should complete this program in three semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

## MEDICAL ASSISTING (A45400)

The Medical Assisting curriculum prepares multi-skilled health care professionals qualified to perform administrative, clinical, and laboratory procedures.

Course work includes instruction in scheduling appointments, coding and processing insurance accounts, billing, collections, medical transcription, computer operations; assisting with examinations/treatments, performing routine laboratory procedures, electrocardiography, supervised medication administration; and ethical/legal issues associated with patient care.

Graduates of CAAHEP-accredited medical assisting programs may be eligible to sit for the American Association of Medical Assistants' Certification Examination to become Certified Medical Assistants. Employment opportunities include physicians' offices, health maintenance organizations, health departments, and hospitals.

### Course and Hour Requirements

		<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>					
BIO 163	Basic Anatomy and Physiology	4	2	0	5
MED 110	Orientation to Medical Assisting	1	0	0	1
MED 114	Professional Interaction in Health Care	1	0	0	1
MED 118	Medical Law and Ethics	2	0	0	2
MED 121	Medical Terminology I	3	0	0	3
MED 122	Medical Terminology II	3	0	0	3
MED 130	Administrative Office Procedures I	1	2	0	2
MED 131	Administrative Office Procedures II	1	2	0	2
MED 134	Medical Transcription	2	2	0	3
MED 140	Examination Room Procedures I	3	4	0	5
MED 150	Laboratory Procedures I	3	4	0	5
MED 180	CPR Certification	0	2	0	1
MED 232	Medical Insurance Coding	1	3	0	2
MED 240	Examination Room Procedures II	3	4	0	5
MED 260	Medical Assisting Clinical Externship	0	0	15	5
MED 262	Clinical Perspectives	1	0	0	1
MED 270	Symptomatology	2	2	0	3
MED 272	Drug Therapy	3	0	0	3
MED 276	Patient Education	1	2	0	2

OST 136	Word Processing	1	2	0	2
*	Major Course Electives	2	0	0	2
	<b>TOTALS</b>	<b>38</b>	<b>31</b>	<b>15</b>	<b>58</b>

#### **GENERAL EDUCATION COURSES**

COM 231	Public Speaking	3	0	0	3
ENG 111	Expository Writing	3	0	0	3
HUM 115	Critical Thinking	3	0	0	3
MAT 110	Mathematical Measurement	2	2	0	3
PSY 150	General Psychology	3	0	0	3
	<b>TOTALS</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>53/54</b>	<b>33</b>	<b>15/41</b>	<b>74</b>
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\* Recommended Electives

Major Course Electives:

COE 111; COE 112; HSC 110; MED 112; MED 113; MED 264

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Commission on Accreditation for Medical Assistant Education.

This program has certificate options. Contact the program director for specific requirements.

## MEDICAL SONOGRAPHY (A45440)

The Medical Sonography curriculum provides knowledge and clinical skills in the application of high frequency sound waves to image internal body structures.

Course work includes physics, cross-sectional anatomy, abdominal, introductory vascular, and obstetrical/gynecological sonography. Competencies are attained in identification of normal anatomy and pathological processes, use of equipment, fetal growth and development, integration of related imaging, and patient interaction skills.

Graduates of accredited programs may be eligible to take examinations in ultrasound physics and instrumentation and specialty examinations administered by the American Registry of Diagnostic Medical Sonographers and find employment in clinics, physicians' offices, mobile services, hospitals, and educational institutions.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
BIO 163	Basic Anatomy and Physiology	4	2	0	5
SON 110	Introduction to Sonography	1	3	3	3
SON 111	Sonographic Physics	3	3	0	4
SON 120	SON Clinical Education I	0	0	15	5
SON 121	SON Clinical Education II	0	0	15	5
SON 130	Abdominal Sonography I	2	3	0	3
SON 131	Abdominal Sonography II	1	3	0	2
SON 140	Gynecologic Sonography	2	0	0	2
SON 220	SON Clinical Education III	0	0	24	8
SON 221	SON Clinical Education IV	0	0	24	8
SON 225	Case Studies	0	3	0	1
SON 241	Obstetrical Sonography I	2	0	0	2
SON 242	Obstetrical Sonography II	2	0	0	2
SON 250	Vascular Sonography	1	3	0	2
SON 289	Sonographic Topics	2	0	0	2
	<b>TOTALS</b>	<b>20</b>	<b>20</b>	<b>81</b>	<b>51</b>
<b>GENERAL EDUCATION COURSES</b>					
ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
PHIL 115	Critical Thinking	3	0	0	3
MATH 121	Algebra/Trigonometry I	2	2	0	3

PSY 150	General Psychology	3	0	0	3
<b>TOTALS</b>		<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>		<b>35</b>	<b>22</b>	<b>81</b>	<b>70</b>
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Students entering Medical Sonography must hold a current CPR certification by the American Heart Association Level C or American Red Cross.

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has accreditation by the Commission on the Accreditation of Allied Health Educational Programs (CAAHEP) in cooperation with the Joint Review Committee on Education in Diagnostic Medical Sonography.

This program has certificate options. Contact the program director for specific requirements.

The medical advisor for this program is William S. Trough, M.D.

## NUCLEAR MEDICINE TECHNOLOGY (A45460)

The Nuclear Medicine Technology curriculum provides the clinical and didactic experience necessary to prepare students to qualify as entry-level nuclear medicine technologists.

Students will acquire the knowledge and skills necessary to properly perform clinical procedures. These skills include patient care, use of radioactive materials, operation of imaging and counting instrumentation, and laboratory procedures.

Graduates may be eligible to apply for certification/registration examinations given by the Nuclear Medicine Technology Certification Board and the American Registry of Radiologic Technologists.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
BIO 163	Basic Anatomy and Physiology		4	2	0	5
HSC 120	CPR		0	2	0	1
NMT 110	Introduction to Nuclear Medicine		2	0	0	2
NMT 110A	Introduction to Nuclear Medicine Lab		0	3	0	1
NMT 126	Nuclear Physics		2	0	0	2
NMT 132	Overview-Clinical Nuclear Medicine		2	0	6	4
NMT 134	Nuclear Pharmacy		2	0	0	2
NMT 136	Health Physics		2	0	0	2
NMT 211	NMT Clinical Practice I		0	0	21	7
NMT 212	Procedures for Nuclear Medicine I		2	0	0	2
NMT 212A	Procedures for Nuclear Medicine I Lab		0	3	0	1
NMT 214	Radiobiology		2	0	0	2
NMT 215	Non-Imaging Instrumentation		1	3	0	2
NMT 218	Computers in Nuclear Medicine		2	0	0	2
NMT 221	NMT Clinical Practice II		0	0	21	7
NMT 222	Procedures for Nuclear Medicine II		2	0	0	2
NMT 222A	Procedures for Nuclear Medicine II Lab		0	3	0	1
NMT 225	Imaging Instrumentation		1	3	0	2
HY 125	Health Sciences Physics		3	2	0	4
<b>TOTALS</b>			<b>27</b>	<b>21</b>	<b>48</b>	<b>51</b>

**GENERAL EDUCATION COURSES**

CHM 130	General, Organic, and Biochemistry	3	0	0	3
CHM 130A	General, Organic, and Biochemistry Lab	0	2	0	1
ENG 111	Expository Writing	3	0	0	3
ENG 115	Oral Communication	3	0	0	3
HUM 230	Leadership Development	3	0	0	3
MAT 115	Mathematical Models	2	2	0	3
MAT 151	Statistics I	3	0	0	3
MAT 151A	Statistics I Lab	0	2	0	1
PSY 150	General Psychology	3	0	0	3
<b>TOTALS</b>		<b>20</b>	<b>6</b>	<b>0</b>	<b>23</b>

**FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>48</b>	<b>27</b>	<b>48</b>	<b>75</b>
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Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed achieve minimum requirements in English, math or science.

This program is accreditation by the Joint Review Committee on Education in Nuclear Medicine Technology.

The medical advisor for this program is Julian W. Vainright, M.D.

## OCCUPATIONAL THERAPY ASSISTANT (A45500)

The Occupational Therapy Assistant curriculum prepares individuals to work under the supervision of a registered/licensed occupational therapist in screening, assessing, planning, and implementing treatment and documenting progress for clients receiving occupational therapy services.

Course work includes human growth and development, conditions which interfere with activities of daily living, theory and process of occupational therapy, individual/group treatment activities, therapeutic use of self, activity analysis, and grading/adapting activities and environments.

Graduates may be eligible to take the national certification examination for practice as a certified occupational therapy assistant. Employment opportunities include hospitals, rehabilitation facilities, long-term/extended-care facilities, sheltered workshops, schools, home health programs, and community programs.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
BIO	168	Anatomy and Physiology I	3	3	0	4
OTA	110	Fundamentals of OT	2	3	0	3
OTA	120	OT Media I	1	3	0	2
OTA	130	Assessment Skills	2	3	0	3
OTA	140	Professional Skills I	0	3	0	1
OTA	150	Life Span Skills I	2	3	0	3
OTA	161	Fieldwork I-Placement 1	0	0	3	1
OTA	162	Fieldwork I-Placement 2	0	0	3	1
OTA	163	Fieldwork I-Placement 3	0	0	3	1
OTA	170	Physical Dysfunction	2	3	0	3
OTA	180	Psychosocial Dysfunction	2	3	0	3
OTA	220	OT Media II	1	6	0	3
OTA	240	Professional Skills II	0	3	0	1
OTA	250	Life Span Skills II	2	3	0	3
OTA	260	Fieldwork II-Placement 1	0	0	18	6
OTA	261	Fieldwork II-Placement 2	0	0	18	6
PSY	241	Developmental Psychology	3	0	0	3
PSY	281	Abnormal Psychology	3	0	0	3
SOC	240	Social Psychology	3	0	0	3
<b>TOTALS</b>			<b>26</b>	<b>36</b>	<b>45</b>	<b>53</b>

### GENERAL EDUCATION COURSES

BIO	169	Anatomy and Physiology II	3	3	0	4
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COM 231	Public Speaking	3	0	0	3
ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3
HUM 115	Critical Thinking	3	0	0	3
PSY 150	General Psychology	3	0	0	3
<b>TOTALS</b>		<b>18</b>	<b>3</b>	<b>0</b>	<b>19</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
CIS 111	Basic PC Literacy	1	2	0	2
<b>TOTALS</b>		<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>

<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>46</b>	<b>41</b>	<b>45</b>	<b>75</b>
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Students enrolled full-time and making satisfactory progress should complete this program in six semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

Initial enrollment is in the Spring semester. Students must complete Level II Fieldwork within 18 months following completion of academic preparation.

This program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA's phone number is (301) 652-AOTA.

## OFFICE SYSTEMS TECHNOLOGY (A25360)

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on non-technical as well as technical skills.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management.

### Course and Hour Requirements

		<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>					
ACC 115	College Accounting	3	2	0	4
BUS 260	Business Communication	3	0	0	3
CIS 111	Basic PC Literacy	1	2	0	2
CIS 120	Spreadsheet I	2	2	0	3
CIS 154	Database Utilization	1	2	0	2
COE 112	Co-op Work Experience I	0	0	20	2
OST 131	Keyboarding	1	2	0	2
OST 134	Text Entry and Formatting	3	2	0	4
OST 136	Word Processing	1	2	0	2
OST 164	Text Editing Applications	3	0	0	3
OST 223	Machine Transcription I	1	2	0	2
OST 224	Machine Transcription II	1	2	0	2
OST 233	Office Publications Design	2	2	0	3
OST 236	Advanced Word and Information Processing	2	2	0	3
OST 284	Emerging Technologies	2	0	0	2
OST 289	Office Systems Management	2	2	0	3
*	Major Elective	-	-	-	8/9
	<b>TOTALS</b>	-	-	-	<b>50/51</b>
<b>GENERAL EDUCATION COURSES</b>					
ENG 111	Expository Writing	3	0	0	3
COM 231	Public Speaking	3	0	0	3
OR					
ENG 115	Oral Communication				
MAT 110	Mathematical Measurement	2	2	0	3

*	Humanities/Fine Arts Electives	3	0	0	3
	Social/Behavioral				
	Sciences Electives	3	0	0	3
	<b>TOTALS</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>66-67</b>
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#### **\* Recommended Electives**

##### **Major Electives:**

BUS 121; BUS 137; BUS 153; BUS 270; COE 115; OST 197; OST 184

##### **Humanities/Fine Arts Electives:**

ART 111; MUS 110

##### **Social/Behavioral Sciences Electives:**

GEO 110; GEO 111; PSY 118; PSY 150; SOC 210; SOC 213; SOC 220

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has certificate and diploma options. Contact the program director for specific requirements.

## OFFICE SYSTEMS TECHNOLOGY/MEDICAL (A2536B)

Medical is a concentration under the curriculum title of Office Systems Technology. This curriculum prepares individuals for entry-level positions in medical and allied health facilities. Jobs include transcription, secretary, hospital unit secretary, records clerk, insurance form preparer, patient accounting clerk, and clinical technician.

Course work includes processing, compiling, recording, and maintaining medical records; utilizing office equipment and software; medical law and ethics; billing and coding; and transcribing medical documents.

Employment opportunities include the offices of allied health facilities, HMOs, insurance claims processors, laboratories, and manufacturers and suppliers of medical and hospital equipment.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
BUS 260	Business Communication		3	0	0	3
BUS 270	Professional Development		3	0	0	3
COE 112	Co-op Work Experience I		0	0	20	2
MED 121	Medical Terminology I		3	0	0	3
MED 122	Medical Terminology II		3	0	0	3
OST 131	Keyboarding		1	2	0	2
OST 134	Text Entry and Formatting		3	2	0	4
OST 136	Word Processing		1	2	0	2
OST 148	Medical Coding, Billing, and Insurance		3	0	0	3
OST 149	Medical Legal Issues		2	0	0	2
OST 164	Text Editing Applications		3	0	0	3
OST 223	Machine Transcription I		1	2	0	2
OST 236	Advanced Word and Information Processing		2	2	0	3
OST 241	Medical Office Transcription 1		1	2	0	2
OST 242	Medical Office Transcription II		1	2	0	2
OST 243	Medical Office Simulation		2	2	0	3
OST 284	Emerging Technologies		2	0	0	2
OST 289	Office Systems Management		2	2	0	3
*	Major Elective		-	-	-	8-9
	<b>TOTALS</b>		-	-	-	<b>55/56</b>

### GENERAL EDUCATION COURSES

BIO 161	Introduction to Human Biology		3	0	0	3
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ENG 111	Expository Writing	3	0	0	3
ENG 115	Oral Communication	3	0	0	3
OR					
SPH 231	Public Speaking				
*	Humanities/Fine Arts Elective	3	0	0	3
	Social/Behavioral				
	Sciences Elective	3	0	0	3
	<b>TOTALS</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>15</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
CIS 111	Basic PC Literacy	1	2	0	2
	<b>TOTALS</b>				

#### **TOTAL CREDITS FOR AAS DEGREE**

- - - **72-73**

#### **\* Recommended Electives**

##### Major Electives:

BUS 137; CIS 121; CIS 122; COE 115; HMT 110; NET 115; OST 137; OST 197; OST 247; OST 248

##### Humanities/Fine Arts Electives:

ART 111; MUS 110

##### Social/Behavioral Sciences Electives:

GEO 110; GEO 111; PSY 118; PSY 150; SOC 210; SOC 213; SOC 220

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has certificate and diploma options. Contact the program director for specific requirements.

## PARALEGAL TECHNOLOGY (A25380)

The Paralegal Technology curriculum prepares individuals to work under the supervision of attorneys by performing routine legal tasks and assisting with substantive legal work. A paralegal/legal assistant may not practice law, give legal advice, or represent clients in a court of law.

Course work includes substantive and procedural legal knowledge in the areas of civil litigation, legal research and writing, real estate, family law, wills, estates, trusts, and commercial law. Required courses also include subjects such as English, mathematics, and computer utilization.

Graduates are trained to assist attorneys in probate work, investigations, public records search, drafting and filing legal documents, research, and office management. Employment opportunities are available in private law firms, governmental agencies, banks, insurance agencies, and other business organizations.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
ACC	111	Financial Accounting	3	0	0	3
CIS	111	Basic PC Literacy	1	2	0	2
COE	111	Co-op Work Experience I	0	0	10	1
COE	115	Work Experience Seminar I	1	0	0	1
LEX	110	Introduction to Paralegal Study	2	0	0	2
LEX	120	Legal Research and Writing I	2	2	0	3
LEX	121	Legal Research and Writing II	2	2	0	3
LEX	130	Civil Injuries	2	0	0	2
LEX	140	Civil Litigation I	3	0	0	3
LEX	141	Civil Litigation II	2	2	0	3
LEX	150	Commercial Law	2	2	0	3
LEX	160	Criminal Law and Procedures	2	2	0	3
LEX	170	Administrative Law	2	0	0	2
LEX	210	Real Property I	2	0	0	2
LEX	211	Real Property II	1	4	0	3
LEX	240	Family Law	2	0	0	2
LEX	250	Wills, Estates, and Trusts	2	2	0	3
LEX	260	Bankruptcy and Collections	2	0	0	2
LEX	270	Law Office Management and Technology	1	2	0	2
LEX	280	Ethics and Professionalism	2	0	0	2
OST	131	Keyboarding	1	2	0	2
OST	136	Word Processing	1	2	0	2

OST 284	Emerging Technologies	2	0	0	2
<b>TOTALS</b>		<b>40</b>	<b>24</b>	<b>10</b>	<b>53</b>

### **GENERAL EDUCATION COURSES**

ENG 111	Expository Writing	3	0	0	3
ENG 112	Argument-Based Research	3	0	0	3
ENG 115	Oral Communication	3	0	0	3
MAT 120	Geometry and Trigonometry	2	2	0	3
POL 130	State and Local Government	3	0	0	3
PSY 150	General Psychology	3	0	0	3
SPA 111	Elementary Spanish I	3	0	0	3
<b>TOTALS</b>		<b>20</b>	<b>2</b>	<b>0</b>	<b>21</b>

### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>		<b>61</b>	<b>26</b>	<b>10</b>	<b>75</b>
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Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program is accredited by the American Bar Association.

## RADIATION THERAPY TECHNOLOGY (A45680)

The Radiation Therapy Technology curriculum is designed to train students to work in conjunction with nurses, physicists, and physicians in the application of prescribed doses of ionizing radiation for the treatment of disease, primarily cancer.

Course work includes physics, anatomy and physiology, dosimetry, and clinical oncology. The student will be skilled in treatment management, administration of prescribed radiation treatment, and provision of patient support.

Graduates may be eligible to sit for the National Radiation Therapy Exam, given by the American Registry of Radiologic Technologists. Employment opportunities can be found in hospitals and freestanding cancer centers.

### Course and Hour Requirements

			Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>						
BIO	271	Pathophysiology	3	0	0	3
RAD	110	Radiography Introduction and Patient Care	2	3	0	3
RAD	111	Radiographic Procedures I	3	3	0	4
RAD	121	Radiographic Imaging I	2	3	0	3
RAD	151	RAD Clinical Education I	0	0	6	2
RTT	121	Special Imaging	2	0	0	2
RTT	151	RTT Clinical Education II	0	0	9	3
RTT	161	RTT Clinical Education III	0	0	6	2
RTT	210	Radiobiology	2	0	0	2
RTT	220	Radiation Therapy Orientation	2	0	0	2
RTT	221	Clinical Oncology I	2	0	0	2
RTT	222	Clinical Oncology II	2	0	0	2
RTT	232	Radiation Therapy Procedures	2	0	0	2
RTT	233	Radiation Therapy Physics	2	0	0	2
RTT	234	Clinical Dosimetry	1	3	0	2
RTT	240	RTT Clinical Education IV	0	0	18	6
RTT	241	RTT Clinical Education V	0	0	21	7
RTT	246	RTT Clinical Education VI	0	0	18	6
<b>TOTALS</b>			<b>25</b>	<b>12</b>	<b>78</b>	<b>55</b>
<b>GENERAL EDUCATION COURSES</b>						
BIO	168	Anatomy and Physiology I	3	3	0	4
BIO	169	Anatomy and Physiology II	3	3	0	4
ENG	111	Expository Writing	3	0	0	3

ENG 114	Professional Research and Reporting	3	0	0	3
HUM 230	Leadership Development	3	0	0	3
PSY 141	Psychology of Death and Dying	3	0	0	3
<b>TOTALS</b>		<b>18</b>	<b>6</b>	<b>0</b>	<b>20</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>		<b>44</b>	<b>18</b>	<b>78</b>	<b>76</b>
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Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program is accredited by the Joint Review Committee on Education in Radiologic Technology.

This program has a diploma option. Contact the program director for specific requirements.

The medical advisor for this program is Ulf L. Karlsson, M.D., PhD

## RADIOGRAPHY (A45700)

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body.

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographers. Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
HSC 120	CPR	0	2	0	1
RAD 110	Radiography Introduction and Patient Care	2	3	0	3
RAD 111	Radiographic Procedures I	3	3	0	4
RAD 112	Radiographic Procedures II	3	3	0	4
RAD 121	Radiographic Imaging I	2	3	0	3
RAD 122	Radiographic Imaging II	1	3	0	2
RAD 131	Radiographic Physics I	1	3	0	2
RAD 151	RAD Clinical Education I	0	0	6	2
RAD 161	RAD Clinical Education II	0	0	15	5
RAD 171	RAD Clinical Education III	0	0	12	4
RAD 211	Radiographic Procedures III	2	3	0	3
RAD 231	Radiographic Physics II	1	3	0	2
RAD 241	Radiation Protection	2	0	0	2
RAD 245	Radiographic Analysis	2	3	0	3
RAD 251	RAD Clinical Education IV	0	0	21	7
RAD 261	RAD Clinical Education V	0	0	21	7
<b>TOTALS</b>		<b>19</b>	<b>29</b>	<b>75</b>	<b>54</b>
<b>GENERAL EDUCATION COURSES</b>					
BIO 163	Basic Anatomy and Physiology	4	2	0	5
ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	3

HUM 115	Critical Thinking	3	0	0	3
PSY 150	General Psychology	3	0	0	3
<b>TOTALS</b>		<b>16</b>	<b>2</b>	<b>0</b>	<b>17</b>

#### **FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
CIS 111	Basic PC Literacy	1	2	0	2
<b>TOTALS</b>		<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>

<b>TOTAL CREDITS FOR AAS DEGREE</b>		<b>37</b>	<b>33</b>	<b>75</b>	<b>74</b>
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Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program is accredited by the Joint Review Committee on Education in Radiologic Technology.

The medical advisor for this program is Julian W. Vainright, M.D.

## REAL ESTATE (C25400)

The Real Estate curriculum provides the prelicensing education required by the North Carolina Real Estate Commission, prepares individuals to enter the profession, and offers additional education to meet professional development needs.

Course work includes the practices and principles of real estate, emphasizing financial and legal applications, property development, and property values.

Graduates should qualify for North Carolina Real Estate Sales and Broker examinations. They should be able to enter apprenticeship training and to provide real estate services to consumers in a competent manner.

### Course and Hour Requirements

	<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
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#### MAJOR COURSES

RLS 112	Real Estate Fundamentals	4	0	0	4
RLS 113	Real Estate Mathematics	2	0	0	2
RLS 114	Real Estate Brokerage	2	0	0	2
RLS 115	Real Estate Finance	2	0	0	2
RLS 116	Real Estate Law	2	0	0	2

<b>TOTAL CREDITS FOR CERTIFICATE</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>12</b>
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Students making satisfactory progress should complete this program in three semesters.

## REAL ESTATE APPRAISAL (C25420)

The Real Estate Appraisal curriculum is designed to prepare individuals to enter the appraisal profession as a registered trainee and advance to licensed or certified appraiser levels.

Course work includes appraisal theory and concepts with applications, the North Carolina Appraisers Act, North Carolina Appraisal Board rules, and the Uniform Standards of Professional Appraisal Practice.

Graduates should be prepared to complete the North Carolina Registered Trainee Examinations and advance to licensure or certification levels as requirements are met.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
REA 101	Introduction to Real Estate Appraisal R-1	2	0	0	2
REA 102	Valuation Principles and Practice R-2	2	0	0	2
REA 103	Applied Residential Property Valuation	2	0	0	2
REA 201	Introduction to Income Property Appraisal G-1	2	0	0	2
REA 202	Advanced Income Capitalization Procedures G-2	2	0	0	2
REA 203	Applied Income Property Valuation G-3	2	0	0	2
<b>TOTAL CREDITS FOR CERTIFICATE</b>		<b>12</b>	<b>0</b>	<b>0</b>	<b>12</b>

Students making satisfactory progress should complete this program in three semesters.

## RESPIRATORY CARE (A45720)

The Respiratory Care curriculum prepares individuals to function as respiratory care technicians and/or respiratory care therapists. In these roles, individuals perform diagnostic testing, treatments, and management of patients with heart and lung diseases.

Students will master skills in patient assessment and treatment of cardiopulmonary diseases. These skills include life support, monitoring, drug administration, and treatment of patients of all ages in a variety of settings.

Graduates of accredited programs may be eligible to take entry-level examinations from the National Board of Respiratory Care. Therapy graduates may also take the Advanced Practitioner examination. Graduates may be employed in hospitals, clinics, nursing homes, education, industry, and home care.

Pitt Community College provides the two-year (five semester) associate degree Respiratory Care Technology program. This program prepares the student as a respiratory therapist which meets the specific needs of our user community.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
RCP 110	Introduction to Respiratory Care	3	3	0	4
RCP 111	Therapeutics and Diagnostics	4	3	0	5
RCP 112	Patient Management	3	3	0	4
RCP 113	RCP Pharmacology	2	0	0	2
RCP 114	Cardiopulmonary Anatomy and Physiology	3	0	0	3
RCP 115	Cardiopulmonary Pathophysiology	2	0	0	2
RCP 135	RCP Clinical Practice I	0	0	15	5
RCP 145	RCP Clinical Practice II	0	0	15	5
RCP 153	RCP Clinical Practice III	0	0	9	3
RCP 210	Critical Care Concepts	3	3	0	4
RCP 211	Advanced Monitoring/Procedures	3	3	0	4
RCP 214	Neonatal/Pediatric Respiratory Care	1	3	0	2
RCP 215	Career Preparation-Advanced Level	0	3	0	1
RCP 235	RCP Clinical Practice IV	0	0	15	5
RCP 247	RCP Clinical Practice V	0	0	21	7
<b>TOTALS</b>		<b>24</b>	<b>21</b>	<b>75</b>	<b>56</b>

**GENERAL EDUCATION COURSES**

BIO 163	Basic Anatomy and Physiology	4	2	0	5
ENG 111	Expository Writing	3	0	0	3
ENG 115	Oral Communication	3	0	0	3
HUM 115	Critical Thinking	3	0	0	3
PSY 150	General Psychology	3	0	0	3

**TOTALS**

<b>16</b>	<b>2</b>	<b>0</b>	<b>17</b>
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**FOUNDATION COURSES**

ACA 111	College Student Success	1	0	0	1
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**TOTAL CREDITS FOR AAS DEGREE**

<b>41</b>	<b>23</b>	<b>75</b>	<b>74</b>
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Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in association with the Joint Review Committee for Respiratory Therapy Education.

The medical advisor for this program is Dr. Robert Shaw, M.D., F.A.C.P., F.C.C.P.

## **SURVEYING TECHNOLOGY (C40380)**

The Surveying Technology curriculum provides training for technicians in the many areas of surveying. Surveyors are involved in land surveying, route surveying, construction surveying, photogrammetry, mapping, global positioning systems, geographical information systems, and other areas of property description and measurements.

Course work includes the communication and computational skills required for boundary, construction, route, and control surveying, photogrammetry, topography, drainage, surveying law, and subdivision design, with emphasis upon applications of electronic data collection and related software including CAD.

Graduates should qualify for jobs as survey party chief, instrument person, surveying technician, highway surveyor, mapper, GPS technician and CAD operator. Graduates will be prepared to pursue the requirements necessary to become a Registered Land Surveyor in North Carolina.

### **Course and Hour Requirements**

		<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>MAJOR COURSES</b>					
EGR 115	Introduction to Technology	2	6	0	4
SRV 110	Surveying I	2	6	0	4
SRV 111	Surveying II	2	6	0	4
<b>TOTALS</b>		<b>6</b>	<b>18</b>	<b>0</b>	<b>12</b>
<b>GENERAL EDUCATION COURSES</b>					
MAT 121	Algebra/Trigonometry I	2	2	0	3
<b>TOTAL CREDITS FOR CERTIFICATE</b>		<b>8</b>	<b>20</b>	<b>0</b>	<b>15</b>

This is primarily an evening program and course offerings will vary from semester to semester.

## WELDING TECHNOLOGY (A50420)

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provides the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry-level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

### Course and Hour Requirements

		Class	Lab	Clin/ WExp	Credit Hours
<b>MAJOR COURSES</b>					
BPR 111	Blueprint Reading	1	2	0	2
BPR 130	Blueprint Reading/Construction	1	2	0	2
CIS 130	Survey of Operating Systems	2	3	0	3
ISC 112	Industrial Safety	2	0	0	2
MAT 120	Geometry and Trigonometry	2	2	0	3
WLD 110	Cutting Processes	1	3	0	2
WLD 115	SMAW (Stick) Plate	2	9	0	5
WLD 116	SMAW (Stick) Plate/Pipe	1	9	0	4
WLD 121	GMAW (MIG) FCAW/Plate	2	6	0	4
WLD 122	GMAW (MIG) Plate/Pipe	1	6	0	3
WLD 131	GTAW (TIG) Plate	2	6	0	4
WLD 132	GTAW (TIG) Plate/Pipe	1	6	0	3
WLD 141	Symbols and Specifications	2	2	0	3
WLD 151	Fabrication I	2	6	0	4
WLD 215	SMAW (Stick) Pipe	1	9	0	4
WLD 251	Fabrication II	1	6	0	3
WLD 262	Inspection and Testing	2	2	0	3
	<b>TOTALS</b>	<b>26</b>	<b>79</b>	<b>0</b>	<b>54</b>
<b>GENERAL EDUCATION COURSES</b>					
ENG 111	Expository Writing	3	0	0	3
ENG 115	Oral Communication	3	0	0	3
HUM 115	Critical Thinking	3	0	0	3

MAT 115	Mathematical Models	2	2	0	3
*	Social/Behavioral Sciences Electives	3	0	0	3
	<b>TOTALS</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>15</b>

#### FOUNDATION COURSES

ACA 111	College Student Success	1	0	0	1
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<b>TOTAL CREDITS FOR AAS DEGREE</b>	<b>41</b>	<b>81</b>	<b>0</b>	<b>70</b>
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\* Recommended Electives

Social/Behavioral Sciences Electives:

PSY 118; PSY 135; SOC 215

Students enrolled full-time and making satisfactory progress should complete this program in five semesters. Additional time may be needed to achieve minimum requirements in English, math or science.

This program has certificate and diploma options. Contact the program director for specific requirements.

## **DEVELOPMENTAL COURSES**

## DEVELOPMENTAL COURSES

If students, as a result of placement test, are found to be deficient in English, mathematics, reading, and science skills, they will be required to take the appropriate courses from the following lists.

### Course and Hour Requirements

		<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>ACADEMIC RELATED</b>					
ACA 090	Study Skills	3	0	0	3
<b>BIOLOGY</b>					
BIO 094	Concepts of Human Biology	3	2	0	4
<b>CHEMISTRY</b>					
CHM 094	Basic Biological Chemistry	3	2	0	4
<b>ENGLISH</b>					
ENG 060	Speaking English Well	2	0	0	2
ENG 070	Basic Language Skills	2	2	0	3
ENG 085	Reading and Writing Foundations	5	0	0	5
ENG 085A	Reading and Language Foundations Lab	0	2	0	1
ENG 095	Reading and Composition Strategies	5	0	0	5
ENG 095A	Reading and Composition Strategies Lab	0	2	0	1
<b>MATHEMATICS</b>					
MAT 050	Basic Math Skills	3	2	0	4
MAT 060	Essential Mathematics	3	2	0	4
MAT 070	Introductory Algebra	3	2	0	4
MAT 080	Intermediate Algebra	3	2	0	4
<b>OFFICE SYSTEMS TECHNOLOGY</b>					
OST 080	Keyboarding Literacy	1	2	0	2

**NOTE:** Developmental courses do not meet elective or graduation requirements.

A minimum grade of "C" in all developmental courses is required to advance to the next level.

## **COURSE PREFIX IDENTIFICATION**

## COURSE PREFIX IDENTIFICATION

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CIV	CIVIL ENGINEERING .....	228
CJC	CRIMINAL JUSTICE .....	229
COE	COOPERATIVE EDUCATION .....	234
COM	COMMUNICATION .....	238
COS	COSMETOLOGY .....	239
CSC	COMPUTER SCIENCE .....	242
CVS	CARDIOVASCULAR SONOGRAPHY .....	244
DFT	DRAFTING .....	245
DRA	DRAMA .....	246
ECO	ECONOMICS .....	246
EDU	EDUCATION .....	247
EGR	ENGINEERING .....	252
ELC	ELECTRICITY .....	252
ELN	ELECTRONICS .....	256
ENG	ENGLISH .....	259
GEO	GEOGRAPHY .....	264
GRD	GRAPHIC DESIGN .....	265
GRO	GERONTOLOGY .....	268
HEA	HEALTH .....	268
HIS	HISTORY .....	268
HIT	HEALTH INFORMATION TECHNOLOGY .....	270
IMT	HEALTHCARE MANAGEMENT .....	274
ISC	HEALTH SCIENCES .....	275
ISE	HUMAN SERVICES .....	276

HUC	HEALTH UNIT COORDINATOR .....	280
HUM	HUMANITIES .....	280
HYD	HYDRAULICS .....	282
INS	INSURANCE .....	282
ISC	INDUSTRIAL SCIENCE .....	284
LEX	LEGAL EDUCATION .....	286
MAC	MACHINING .....	290
MAS	MASONRY .....	290
MAT	MATHEMATICS .....	292
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MED	MEDICAL ASSISTING .....	300
MKT	MARKETING AND RETAILING .....	305
MNT	MAINTENANCE .....	307
MRI	MAGNETIC RESONANCE IMAGING .....	308
MUS	MUSIC .....	309
NET	NETWORKING TECHNOLOGY .....	310
NMT	NUCLEAR MEDICINE .....	310
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OMT	OPERATIONS MANAGEMENT .....	315
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PHI	PHILOSOPHY .....	329
PHY	PHYSICS .....	329
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RED	READING .....	343
REL	RELIGION .....	344
RLS	REAL ESTATE .....	345
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SPA	SPANISH .....	354
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WLD	WELDING .....	355

## **COURSE DESCRIPTIONS**

## ACADEMIC RELATED

ACA 090	STUDY SKILLS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course is intended for those who placed into credit-level course work but who are not maintaining satisfactory academic progress toward meeting program goals. Topics include study skills, note taking, learning styles and strategies, test taking, goal setting, and self-assessment skills. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

ACA 111	COLLEGE STUDENT SUCCESS	1	0	0	1
Prerequisites: None					
Corequisites: None					

This course introduces the college's physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives.

ACA 120	CAREER ASSESSMENT	1	0	0	1
Prerequisites: None					
Corequisites: None					

This course provides the information and strategies necessary to develop clear personal, academic, and professional goals. Topics include personality styles, goal setting, various college curricula, career choices, and campus leadership development. Upon completion, students should be able to clearly state their personal, academic, and professional goals and have a feasible plan of action to achieve those goals.

## ACCOUNTING

ACC 111	FINANCIAL ACCOUNTING	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the basic framework of accounting. Emphasis is placed on the accounting cycle and financial statement preparation and analysis. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

		Class	Lab	Clin/ WExp	Credit Hours
ACC 115	COLLEGE ACCOUNTING	3	2	0	4
Prerequisites: None					
Corequisites: None					

This course, for those who have not received credit for ACC 120, introduces basic accounting principles for a sole proprietorship. Topics include the complete accounting cycle with end-of-period statements, bank reconciliation, payrolls, and petty cash. Upon completion, students should be able to demonstrate an understanding of accounting principles and apply those skills to a business organization.

ACC 120	PRINCIPLES OF ACCOUNTING I	3	2	0	4
Prerequisites: None					
Corequisites: None					

This course, for those who have not received credit for ACC 115, introduces the basic principles and procedures of accounting. Emphasis is placed on collecting, summarizing, analyzing, and reporting financial information. Upon completion, students should be able to analyze data and prepare journal entries and reports as they relate to the accounting cycle.

ACC 121	PRINCIPLES OF ACCOUNTING II	3	2	0	4
Prerequisites: ACC 120					
Corequisites: None					

This course is a continuation of ACC 120. Emphasis is placed on corporate and managerial accounting for both external and internal reporting and decision making. Upon completion, students should be able to analyze and record corporate transactions, prepare financial statements and reports, and interpret them for management.

ACC 129	INDIVIDUAL INCOME TAXES	2	2	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the relevant laws governing individual income taxation. Emphasis is placed on filing status, exemptions for dependents, gross income, adjustments, deductions, and computation of tax. Upon completion, students should be able to complete various tax forms pertaining to the topics covered in the course.

ACC 150	COMPUTERIZED GENERAL LEDGER	1	2	0	2
Prerequisites: ACC 115 or ACC 120					
Corequisites: None					

This course introduces microcomputer applications related to the major accounting systems. Topics include general ledger, accounts receivable, accounts payable,

inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to solve accounting problems.

ACC 220	INTERMEDIATE ACCOUNTING I	3	2	0	4
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Prerequisites: ACC 121

Corequisites: None

This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and statements and extensive analyses of balance sheet components. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards.

ACC 221	INTERMEDIATE ACCOUNTING II	3	2	0	4
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Prerequisites: ACC 220

Corequisites: None

This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

ACC 225	COST ACCOUNTING	3	0	0	3
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Prerequisites: ACC 121

Corequisites: None

This course introduces the nature and purposes of cost accounting as an information system for planning and control. Topics include direct materials, direct labor, factory overhead, process, job order, and standard cost systems. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

ACC 240	GOVERNMENT AND NOT-FOR-PROFIT ACCOUNTING	3	0	0	3
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Prerequisites: ACC 121

Corequisites: None

This course introduces principles and procedures applicable to governmental and not-for-profit organizations. Emphasis is placed on various budgetary accounting procedures and fund accounting. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

		Class	Lab	Clin/ WExp	Credit Hours
ACC 269	AUDITING	3	0	0	3
Prerequisites: ACC 220					
Corequisites: None					

This course covers the overall framework of the process of conducting audits and investigations. Emphasis is placed on collecting data from working papers, arranging and systematizing the audit, and writing the audit report. Upon completion, students should be able to demonstrate competence in applying the generally accepted auditing standards and the procedures for conducting an audit.

ACC 279	ADVANCED AUDITING	3	0	0	3
Prerequisites: ACC 269					
Corequisites: None					

This course provides advanced experience in the process of conducting audits and investigations. Emphasis is placed on statistical sampling, analysis, audit program development, professional responsibilities, and the reporting function. Upon completion, students should be able to demonstrate proficiency through completion of audit simulations and/or integrated audit cases.

#### **AIR CONDITIONING, HEATING, AND REFRIGERATION**

AHR 110	INTRODUCTION TO REFRIGERATION	2	6	0	5
Prerequisites: None					
Corequisites: None					

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

AHR 111	HVACR ELECTRICITY	2	2	0	3
Prerequisites: None					
Corequisites: None					

This course introduces electricity as it applies to HVACR equipment. Emphasis is placed on power sources, interaction of electrical components, wiring of simple circuits, and the use of electrical test equipment. Upon completion, students should be able to demonstrate good wiring practices and the ability to read simple wiring diagrams.

AHR 112	HEATING TECHNOLOGY	2	4	0	4
Prerequisites: None					

Corequisites: None

This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

AHR 113	COMFORT COOLING	2	4	0	4
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Prerequisites: None

Corequisites: None

This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychometrics, manufacturer specifications, and test instruments to determine proper system operation.

AHR 114	HEAT PUMP TECHNOLOGY	2	4	0	4
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Prerequisites: AHR 110 or AHR 113

Corequisites: None

This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures.

AHR 120	HVACR MAINTENANCE	1	3	0	2
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Prerequisites: None

Corequisites: None

This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

AHR 130	HVAC CONTROLS	2	2	0	3
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Prerequisites: AHR 111

Corequisites: None

This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analysis and troubleshooting of electrical systems.

	Class	Lab	Clin/ WExp	Credit Hours
Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls.				

AHR 133	HVAC SERVICING	2	6	0	4
Prerequisites: None					
Corequisites: AHR 112 or AHR 113					

The course covers the maintenance and servicing of HVAC equipment. Topics include testing, adjusting, maintaining, and troubleshooting HVAC equipment and record keeping. Upon completion, students should be able to adjust, maintain, and service HVAC equipment.

AHR 140	ALL-WEATHER SYSTEMS	1	3	0	2
Prerequisites: AHR 112 or AHR 113					
Corequisites: None					

This course covers the principles of combination heating and cooling systems including gas-electric, all-electric, and oil-electric systems. Topics include PTAC's and package and split-system units. Upon completion, students should be able to understand systems performance and perform routine maintenance procedures.

AHR 151	HVAC DUCT SYSTEMS I	1	3	0	2
Prerequisites: None					
Corequisites: None					

This course introduces the techniques used to lay out and fabricate duct work commonly found in HVAC systems. Emphasis is placed on the skills required to fabricate duct work. Upon completion, students should be able to lay out and fabricate simple duct work.

AHR 160	REFRIGERANT CERTIFICATION	1	0	0	1
Prerequisites: None					
Corequisites: None					

This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

AHR 210	RESIDENTIAL BUILDING CODE	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course covers the residential building codes that are applicable to the design and installation of HVAC systems. Topics include current residential codes as applied to HVAC design, service, and installation. Upon completion, students

should be able to demonstrate the correct usage of residential building codes that apply to specific areas of the HVAC trade.

AHR 211	RESIDENTIAL SYSTEM DESIGN	2	2	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the principles and concepts of conventional residential heating and cooling system design. Topics include heating and cooling load estimating, basic psychometrics, equipment selection, duct system selection, and system design. Upon completion, students should be able to design a basic residential heating and cooling system.

AHR 212	ADVANCED COMFORT SYSTEMS	2	6	0	4
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Prerequisites: AHR 114  
Corequisites: None

This course covers water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pump systems including variable speed drives and controls. Emphasis is placed on the application, installation, and servicing of water source systems and the mechanical and electronic control components of advanced comfort systems. Upon completion, students should be able to test, analyze, and troubleshoot water-cooled comfort systems, water-source/geothermal heat pumps and high efficiency heat pumps.

AHR 215	COMMERCIAL HVAC CONTROLS	1	3	0	2
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Prerequisites: AHR 111 or ELC 111  
Corequisites: None

This course introduces HVAC control systems used in commercial applications. Topics include electric/electronic control systems, pneumatic control systems, DD temperature sensors, humidity sensors, pressure sensors, wiring, controllers, actuators, and controlled devices. Upon completion, students should be able to verify or correct the performance of common control systems with regard to sequence of operation and safety.

AHR 220	COMMERCIAL BUILDING CODES	1	2	0	2
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Prerequisites: None  
Corequisites: None

This course covers the appropriate sections of the *North Carolina State Building Code* that govern the installation of commercial comfort, refrigeration, and mechanical systems. Emphasis is placed on using and understanding applications sections of the *North Carolina State Building Code*. Upon completion, students should be able to use the *North Carolina State Building Code* to locate information regarding the installation of commercial systems.

		Class	Lab	Clin/ WExp	Credit Hours
AHR 225	COMMERCIAL SYSTEM DESIGN	2	3	0	3
Prerequisites: None					
Corequisites: None					

This course covers the principles of designing heating and cooling systems for commercial buildings. Emphasis is placed on commercial heat loss/gain calculations, applied psychometrics, air-flow calculations, air distribution system design, and equipment selection. Upon completion, students should be able to calculate heat loss/gain, design and size air and water distribution systems, and select equipment.

AHR 240	HYDRONIC HEATING	1	3	0	2
Prerequisites: AHR 112					
Corequisites: None					

This course covers the accepted procedures for proper design, installation, and balance of hydronic heating systems for residential or commercial buildings. Topics include heating equipment; pump, terminal unit, and accessory selection; piping system selection and design; and pipe sizing and troubleshooting. Upon completion, students should be able to assist with the proper design, installation, and balance of typical hydronic systems.

## ANTHROPOLOGY

ANT 210	GENERAL ANTHROPOLOGY	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the physical, archaeological, linguistic, and ethnological fields of anthropology. Topics include human origins, genetic variations, archaeology, linguistics, primatology, and contemporary cultures. Upon completion, students should be able to demonstrate an understanding of the four major fields of anthropology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

ANT 221	COMPARATIVE CULTURES	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course provides an ethnographic survey of societies around the world covering their distinctive cultural characteristics and how these relate to cultural change. Emphasis is placed on the similarities and differences in social institutions such as family, economics, politics, education, and religion. Upon completion, students should be able to demonstrate knowledge of a variety of cultural adaptive strategies.

*This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

## ARCHITECTURE

ARC 111	INTRODUCTION TO ARCHITECTURAL TECHNOLOGY	1	6	0	3
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Prerequisites: None

Corequisites: None

This course introduces basic architectural drafting techniques, lettering, use of architectural and engineer scales, and sketching. Topics include orthographic, axonometric, and oblique drawing techniques using architectural plans, elevations, sections, and details; reprographic techniques; and other related topics. Upon completion, students should be able to prepare and print scaled drawings within minimum architectural standards.

ARC 112	CONSTRUCTION MATERIALS AND METHODS	3	2	0	4
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Prerequisites: None

Corequisites: None

This course introduces construction materials and their methodologies. Topics include construction terminology, materials and their properties, manufacturing processes, construction techniques, and other related topics. Upon completion, students should be able to detail construction assemblies and identify construction materials and properties.

ARC 113	RESIDENTIAL ARCHITECTURAL TECHNOLOGY	1	6	0	3
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Prerequisites: ARC 111

Corequisites: ARC 112

This course covers intermediate residential working drawings. Topics include residential plans, elevations, sections, details, schedules, and other related topics. Upon completion, students should be able to prepare a set of residential working drawings that are within accepted architectural standards.

ARC 114	ARCHITECTURAL CAD	1	3	0	2
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Prerequisites: ARC 111

Corequisites: None

This course introduces basic architectural CAD techniques. Topics include basic commands and system hardware and software. Upon completion, students should

		Class	Lab	Clin/ WExp	Credit Hours
<p>be able to prepare and plot architectural drawings to scale within accepted architectural standards.</p>					
ARC 131	BUILDING CODES	2	2	0	3
Prerequisites: ARC 112					
Corequisites: None					
<p>This course covers the methods of researching building codes for specific projects. Topics include residential and commercial building codes. Upon completion, students should be able to determine the code constraints governing residential and commercial projects.</p>					
ARC 132	SPECIFICATIONS AND CONTRACTS	2	0	0	2
Prerequisites: ARC 112					
Corequisites: None					
<p>This course covers the development of written specifications and the implications of different contractual arrangements. Topics include specification development, contracts, bidding material research, and agency responsibilities. Upon completion, students should be able to write a specification section and demonstrate the ability to interpret contractual responsibilities.</p>					
ARC 141	ELEMENTARY STRUCTURES FOR ARCHITECTURE	4	0	0	4
Prerequisites: ARC 111 and MAT 121					
Corequisites: None					
<p>This course covers concepts of elementary structures in architecture. Topics include structural form, statics, strength of materials, structural behavior, and the relationship between structures and architectural form. Upon completion, students should be able to size simple structural elements.</p>					
ARC 160	RESIDENTIAL DESIGN	1	6	0	3
Prerequisites: ARC 111					
Corequisites: None					
<p>This course introduces the methodology of basic residential design. Topics include residential site design, space organization and layout, residential styles, and the development of schematic design. Upon completion, students should be able to design a residence.</p>					
ARC 211	LIGHT CONSTRUCTION TECHNOLOGY 1		6	0	3
Prerequisites: ARC 111					
Corequisites: ARC 112					
<p>This course covers working drawings for light construction. Topics include plans, elevations, sections, and details; schedules; and other related topics. Upon</p>					

completion, students should be able to prepare a set of working drawings which are within accepted architectural standards.

ARC 213	DESIGN PROJECT	2	6	0	4
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Prerequisites: ARC 114 and ARC 211  
Corequisites: None

This course provides the opportunity to design and prepare a set of contract documents within an architectural setting. Topics include schematic design, design development, construction documents, and other related topics. Upon completion, students should be able to prepare a set of commercial contract documents.

ARC 220	ADVANCED ARCHITECTURAL CAD	1	3	0	2
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Prerequisites: ARC 114  
Corequisites: None

This course provides file management, productivity, and CAD customization skills. Emphasis is placed on developing advanced proficiency techniques. Upon completion, students should be able to create prototype drawings and symbol libraries, compose sheets with multiple details, and use advanced drawing and editing commands.

ARC 230	ENVIRONMENTAL SYSTEMS	3	3	0	4
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Prerequisites: ARC 111 and MAT 121  
Corequisites: None

This course introduces plumbing, mechanical (HVAC), and electrical systems for the architectural environment. Topics include basic plumbing, mechanical, and electrical systems for residential and/or commercial buildings with an introduction to selected code requirements. Upon completion, students should be able to develop schematic drawings for plumbing, mechanical, and electrical systems and perform related calculations.

ARC 240	SITE PLANNING	2	2	0	3
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Prerequisites: ARC 111  
Corequisites: None

This course introduces the principles of site planning, grading plans, and earthwork calculations. Topics include site analysis, site work, site utilities, cut and fill, soil erosion control, and other related topics. Upon completion, students should be able to prepare site development plans and details and perform cut and fill calculations.

ARC 250	SURVEY OF ARCHITECTURE	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the historical trends in architectural form. Topics include historical and current trends in architecture. Upon completion, students should be able to demonstrate an understanding of significant historical and current architectural styles.

ARC 264      DIGITAL ARCHITECTURE

1	3	0	2
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Prerequisites: ARC 114

Corequisites: None

This course covers multiple digital architectural techniques. Topics include spreadsheets and word processing procedures, on-line resources, modems, e-mail, image capture, multimedia, and other related topics. Upon completion, students should be able to transmit/receive electronic data, create multimedia presentations, and produce a desktop publishing document.

## ART

ART 111      ART APPRECIATION

3	0	0	3
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Prerequisites: None

Corequisites: None

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ART 131      DRAWING I

0	6	0	3
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Prerequisites: None

Corequisites: None

This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes.

ART 132      DRAWING II

0	6	0	3
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Prerequisites: ART 131

Corequisites: None

This course continues instruction in the language of drawing and the use of various materials. Emphasis is placed on experimentation in the use of drawing techniques, media, and graphic materials. Upon completion, students should be

able to demonstrate increased competence in the expressive use of graphic form and techniques.

## ASTRONOMY

AST 111	DESCRIPTIVE ASTRONOMY	3	0	0	3
Prerequisites: ENG 095					
Corequisites: AST 111A					

This course introduces an overall view of modern astronomy. Topics include an overview of the solar system, the sun, stars, galaxies, and the larger universe. Upon completion, students should be able to demonstrate an understanding of the universe around them. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

AST 111A	DESCRIPTIVE ASTRONOMY LAB	0	2	0	1
Prerequisites: ENG 095					
Corequisites: AST 111					

The course is a laboratory to accompany AST 111. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 111 and which provide practical experience. Upon completion, students should be able to demonstrate an understanding of the universe around them. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

## AUTOMATION TRAINING

ATR 213	PROGRAMMABLE CONTROLLERS	3	3	0	4
Prerequisites: ELC 131					
Corequisites: None					

This course provides a detailed study of the PLC, related hardware and programming format, and applications in the automated work cell. Topics include input/output modules, power supplies, operator interface, ladder logic, and Boolean language programming. Upon completion, students should be able to install, program, and maintain PLC-controlled systems.

ATR 281	AUTOMATION ROBOTICS	3	2	0	4
Prerequisites: ELC 111 and HYD 110					
Corequisites: None					

This course introduces the concepts and principles of automation in the manufacturing environment. Emphasis is placed on the devices used in hard and flexible automated systems, including the study of inputs, outputs, and control system integration. Upon completion, students should be able to plan, design, and implement automation to support manufacturing processes.

**AUTOMOTIVE**

AUT 115	ENGINE FUNDAMENTALS	2	3	0	3
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Prerequisites: None  
Corequisites: None

This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis/repair of automotive engines using appropriate tools, equipment, procedures, and service information.

AUT 116	ENGINE REPAIR	1	3	0	2
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Prerequisites: None  
Corequisites: None

This course covers service/repair/rebuilding of block, head, and internal engine components. Topics include engine repair/reconditioning using service specifications. Upon completion, students should be able to rebuild/recondition an automobile engine to service specifications.

AUT 141	SUSPENSION AND STEERING SYSTEMS	2	4	0	4
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Prerequisites: None  
Corequisites: None

This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair various steering and suspension components, check and adjust various alignment angles, and balance wheels.

AUT 151	BRAKE SYSTEMS	2	2	0	3
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Prerequisites: None  
Corequisites: None

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

AUT 152	BRAKE SYSTEMS LAB	0	2	1
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Prerequisites: None  
Corequisites: AUT 151

This course provides a laboratory setting to enhance brake system skills. Emphasis is placed on practical experiences that enhance the topics presented in AUT 151. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 151.

AUT 161	ELECTRICAL SYSTEMS	2	6	0	4
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Prerequisites: None  
Corequisites: None

This course covers basic electrical theory and wiring diagrams, test equipment, and diagnosis/repair/replacement of batteries, starters, alternators, and basic electrical accessories. Topics include diagnosis and repair of battery, starting, charging, lighting, and basic accessory systems problems. Upon completion, students should be able to diagnose, test, and repair the basic electrical components of an automobile.

AUT 162	CHASSIS ELECTRICAL AND ELECTRONICS	2	2	0	3
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Prerequisites: None  
Corequisites: None

This course covers electrical/electronic diagnosis/repair, including wiring diagrams, instrumentation, and electronic/computer-controlled devices and accessories. Topics include interpreting wiring diagrams and diagnosis and repair of chassis electrical and electronic systems. Upon completion, students should be able to read and interpret wiring diagrams and determine/perform needed repairs on chassis electrical and electronic systems.

AUT 163	CHASSIS ELECTRICAL AND ELECTRONICS LAB	0	2	0	1
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Prerequisites: None  
Corequisites: AUT 162

This course provides a laboratory setting to enhance chassis electrical and electronic system skills. Emphasis is placed on practical experiences that enhance the topics presented in AUT 162. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 162.

		Class	Lab	Clin/ WExp	Credit Hours
AUT 164	AUTOMOTIVE ELECTRONICS	2	2	0	3
Prerequisites: None					
Corequisites: None					

This course covers fundamentals of electrical/electronic circuitry, semi-conductors, and microprocessors. Topics include Ohm's law, circuits, AC/DC current, solid state components, digital applications, and the use of digital multimeters. Upon completion, students should be able to apply Ohm's law to diagnose and repair electrical/electronic circuits using digital multimeters and appropriate service information.

AUT 171	HEATING AND AIR CONDITIONING	2	3	0	3
Prerequisites: None					
Corequisites: None					

This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis/repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

AUT 181	ENGINE PERFORMANCE-ELECTRICAL 2		3	0	3
Prerequisites: None					
Corequisites: None					

This course covers the principles, systems, and procedures required for diagnosing and restoring engine performance using electrical/electronics test equipment. Topics include procedures for diagnosis and repair of ignition, emission control, and related electronic systems. Upon completion, students should be able to describe operation of and diagnose/repair ignition/emission control systems using appropriate test equipment and service information.

AUT 182	ENGINE PERFORMANCE-ELECTRICAL LAB	0	3	0	1
Prerequisites: None					
Corequisites: AUT 181					

This course provides a laboratory setting to enhance the skills for diagnosing and restoring engine performance using electrical/electronic test equipment. Emphasis is placed on practical experiences that enhance the topics presented in AUT 181. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 181.

AUT 183	ENGINE PERFORMANCE-FUELS	2	3	0	3
Prerequisites: None					

Corequisites: None

This course covers the principles of fuel delivery/management, exhaust/emission systems, and procedures for diagnosing and restoring engine performance using appropriate test equipment. Topics include procedures for diagnosis/repair of fuel delivery/management and exhaust/emission systems using appropriate service information. Upon completion, students should be able to describe, diagnose, and repair engine fuel delivery/management and emission control systems using appropriate service information and diagnostic equipment.

AUT 184	ENGINE PERFORMANCE-FUELS LAB	0	3	0	1
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Prerequisites: None

Corequisites: AUT 183

This course provides a laboratory setting to enhance the skills for diagnosing and repairing fuel delivery/management and emission systems. Emphasis is placed on practical experiences that enhance the topics presented in AUT 183. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 183.

AUT 185	EMISSION CONTROLS	1	2	0	2
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Prerequisites: None

Corequisites: None

This course covers the design and function of emission control devices. Topics include chemistry of combustion as well as design characteristics and emission control devices which limit tailpipe, crankcase, and evaporative emissions. Upon completion, students should be able to troubleshoot, test, and service emission control systems.

AUT 221	AUTOMATIC TRANSMISSIONS	2	6	0	4
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Prerequisites: None

Corequisites: None

This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair automatic drive trains.

AUT 231	MANUAL DRIVE TRAINS/AXLES	2	3	0	3
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Prerequisites: None

Corequisites: None

This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, driveshafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train service and repair

using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair manual drive trains.

AUT 232	MANUAL DRIVE TRAINS/AXLES LAB	0	3	0	1
Prerequisites: None					
Corequisites: AUT 231					

This course provides a laboratory setting to enhance the skills for diagnosing and repairing manual transmissions/transaxles, clutches, driveshafts, axles, and final drives. Emphasis is placed on practical experiences that enhance the topics presented in AUT 231. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 231.

AUT 241	ADVANCED CHASSIS/SUSPENSION	2	6	0	4
Prerequisites: AUT 141					
Corequisites: None					

This course provides advanced training in automotive chassis and suspension using computerized two- and four-wheel alignment equipment. Emphasis is placed on suspension and chassis system design, construction, and repair for modern front- and rear-drive vehicles. Upon completion, students should be able to perform necessary adjustments and repairs on vehicles using computerized alignment equipment.

AUT 281	ADVANCED ENGINE PERFORMANCE	2	2	0	3
Prerequisites: None					
Corequisites: None					

This course utilizes service information and specialized test equipment to diagnose/repair power train control systems. Topics include computerized ignition, fuel and emission systems, related diagnostic tools and equipment, data communication networks, and service information. Upon completion, students should be able to perform advanced engine performance diagnosis and repair.

**BIOLOGY**

*Enrollment in any biology course more than two times requires the written permission of the Science Department chair.*

BIO 094	CONCEPTS OF HUMAN BIOLOGY	3	2	0	4
Prerequisites: ENG 085 or appropriate placement test score					
Corequisites: ENG 095 or appropriate placement test score					

This course focuses on fundamental concepts of human biology. Topics include terminology, biochemistry, cell biology, tissues, body systems, and other related

topics. Upon completion, students should be able to demonstrate preparedness for college-level anatomy and physiology courses.

There is an \$8.00 lab fee for this course.

BIO 110	PRINCIPLES OF BIOLOGY	3	3	0	4
Prerequisites: ENG 095 or appropriate placement test score					
Corequisites: None					

This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, taxonomy, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

There is a \$12.00 lab fee for this course.

BIO 111	GENERAL BIOLOGY I	3	3	0	4
Prerequisites: ENG 095 or appropriate placement test score					
Corequisites: None					

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

There is a \$12.00 lab fee for this course.

BIO 112	GENERAL BIOLOGY II	3	3	0	4
Prerequisites: BIO 111					
Corequisites: None					

This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

There is a \$12.00 lab fee for this course.

BIO 140	ENVIRONMENTAL BIOLOGY	3	0	0	3
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Prerequisites: ENG 095 or appropriate placement test score

Corequisites: None

This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues. At PCC, students who plan to obtain an AA degree must take BIO 140A along with BIO 140. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

BIO 140A	ENVIRONMENTAL BIOLOGY LAB	0	3	0	1
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Prerequisites: ENG 095 or appropriate placement test score

Corequisites: BIO 140

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues. At PCC, students who plan to obtain an AA degree must take BIO 140A along with BIO 140. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

There is a \$12.00 lab fee for this course.

BIO 161	INTRODUCTION TO HUMAN BIOLOGY	3	0	0	3
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Prerequisites: ENG 085 or appropriate placement test score

Corequisites: None

This course provides a basic survey of human biology. Emphasis is placed on the basic structure and function of body systems and the medical terminology used to describe normal and pathological states. Upon completion, students should be able to demonstrate an understanding of normal anatomy and physiology and the appropriate use of medical terminology.

BIO 163	BASIC ANATOMY AND PHYSIOLOGY	4	2	0	5
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Prerequisites: BIO 094 and ENG 095 or appropriate placement test scores

Corequisites: None

This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships.

There is an \$8.00 lab fee for this course.

BIO 165	ANATOMY AND PHYSIOLOGY I	3	3	0	4
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Prerequisites: BIO 094, CHM 094, and ENG 095 or appropriate placement test scores  
Corequisites: None

This course is the first of a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. At PCC, emphasis is placed on those areas of anatomy and physiology applicable to nursing practice and both semesters must be completed for transfer credit.

There is a \$12.00 lab fee for this course.

BIO 166	ANATOMY AND PHYSIOLOGY II	3	3	0	4
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Prerequisites: BIO 165  
Corequisites: None

This course is the second in a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and the interrelationships of all body systems. At PCC, emphasis is placed on those areas of anatomy and physiology applicable to nursing practice and both semesters must be completed for transfer credit.

There is a \$12.00 lab fee for this course.

BIO 168	ANATOMY AND PHYSIOLOGY I	3	3	0	4
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Prerequisites: BIO 094 and ENG 095 or appropriate placement test scores  
Corequisites: None

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, nervous, special senses, and endocrine systems. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. At PCC, emphasis is placed on those areas of anatomy and physiology applicable to OTA and HIT professional practice.

There is a \$12.00 lab fee for this course.

		Class	Lab	Clin/ WExp	Credit Hours
BIO 169	ANATOMY AND PHYSIOLOGY II	3	3	0	4
Prerequisites: BIO 168					
Corequisites: None					

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. At PCC, emphasis is placed on those areas of anatomy and physiology applicable to OTA and HIT professional practice.

There is a \$12.00 lab fee for this course.

BIO 175	GENERAL MICROBIOLOGY	2	2	0	3
Prerequisites: BIO 110, BIO 163, BIO 166, or BIO 169					
Corequisites: None					

This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques.

There is an \$8.00 lab fee for this course.

BIO 271	PATHOPHYSIOLOGY	3	0	0	3
Prerequisites: BIO 163, BIO 166, or BIO 169					
Corequisites: None					

This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is placed on interrelationships among organ systems in deviations from homeostasis. Upon completion, students should be able to demonstrate a detailed knowledge of pathophysiology. At PCC, enrollment is limited to students enrolled in the Radiation Therapy Technology program.

## BLUEPRINT READING

BPR 111	BLUEPRINT READING	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course introduces the basic principles of blueprint reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic blueprints and visualize the features of a part.

BPR 121	BLUEPRINT READING: MECHANICAL	1	2	0	2
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Prerequisites: BPR 111  
Corequisites: None

This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing.

BPR 130	BLUEPRINT READING/ CONSTRUCTION	1	2	0	2
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Prerequisites: None  
Corequisites: None

This course covers the interpretation of blueprints and specifications that are associated with the construction trades. Emphasis is placed on interpretation of details for foundations, floor plans, elevations, and schedules. Upon completion, students should be able to read and interpret a set of construction blueprints.

BPR 135	SCHEMATICS AND DIAGRAMS	2	0	0	2
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Prerequisites: None  
Corequisites: None

This course introduces schematics and diagrams used in a variety of occupations. Topics include interpretation of wiring diagrams, assembly drawings, exploded views, sectional drawings, and service manuals, specifications, and charts. Upon completion, students should be able to research and locate components and assemblies denoting factory specifications and requirements from service and repair manuals.

## BUSINESS

BUS 110	INTRODUCTION TO BUSINESS	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects.

		Class	Lab	Clin/ WExp	Credit Hours
BUS 115	BUSINESS LAW I	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations.

BUS 116	BUSINESS LAW II	3	0	0	3
Prerequisites: BUS 115					
Corequisites: None					

This course continues the study of ethics and business law. Emphasis is placed on bailments, sales, risk-bearing, forms of business ownership, and copyrights. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations.

BUS 121	BUSINESS MATH	2	2	0	3
Prerequisites: None					
Corequisites: None					

This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business.

BUS 135	PRINCIPLES OF SUPERVISION	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the basic responsibilities and duties of the supervisor and his/her relationship to higher-level supervisors, subordinates, and associates. Emphasis is placed on effective utilization of the work force and understanding the role of the supervisor. Upon completion, students should be able to apply supervisory principles in the work place.

BUS 137	PRINCIPLES OF MANAGEMENT	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management.

		Class	Lab	Clin/ WExp	Credit Hours
BUS 151	PEOPLE SKILLS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the basic concepts of identity and communication in the business setting. Topics include self-concept, values, communication styles, feelings and emotions, roles versus relationships, and basic assertiveness, listening, and conflict resolution. Upon completion, students should be able to distinguish between unhealthy, self-destructive, communication patterns and healthy, non-destructive, positive communication patterns.

BUS 153	HUMAN RESOURCE MANAGEMENT	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns.

BUS 217	EMPLOYMENT LAW AND REGULATIONS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the principle laws and regulations affecting public and private organizations and their employees or prospective employees. Topics include fair employment practices, EEO, affirmative action, and employee rights and protections. Upon completion, students should be able to evaluate organization policy for compliance and assure that decisions are not contrary to law.

BUS 225	BUSINESS FINANCE	2	2	0	3
Prerequisites: ACC 120					
Corequisites: None					

This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management.

BUS 228	BUSINESS STATISTICS	2	2	0	3
Prerequisites: MAT 115, MAT 140, or MAT 161					
Corequisites: None					

This course introduces the use of statistical methods and tools in evaluating research data for business applications. Emphasis is placed on basic probability,

measures of spread and dispersion, central tendency, sampling, regression analysis, and inductive inference. Upon completion, students should be able to apply statistical problem solving to business.

BUS 230	SMALL BUSINESS MANAGEMENT	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.

BUS 231	COMPUTERIZED INVENTORY	2	2	0	3
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Prerequisites: ACC 120 and CIS 110  
Corequisites: None

This course provides an overview of inventory procedures as related to management decisions. Emphasis is placed on general terms, methods, techniques, and computer applications. Upon completion, students should be able to apply inventory principles and processes in the workplace.

BUS 234	TRAINING AND DEVELOPMENT	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course covers developing, conducting, and evaluating employee training with attention to adult learning principles. Emphasis is placed on conducting a needs assessment, using various instructional approaches, designing the learning environment, and locating learning resources. Upon completion, students should be able to design, conduct, and evaluate a training program.

BUS 235	PERFORMANCE MANAGEMENT	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course includes the legal background for performance management and the basic methodology used in developing and validating a performance management system. Emphasis is placed on job analysis, job descriptions, appraisal instruments, and action plans. Upon completion, students should be able to develop, implement, and maintain a comprehensive performance management system.

BUS 236	ADVANCED TRAINING AND DEVELOPMENT	3	0	0	3
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Prerequisites: BUS 234

Corequisites: None

This course covers the skills necessary for presenting active training programs applying the principles learned in BUS 234. Emphasis is placed on the equipment and materials employed by various media techniques. Upon completion, students should be able to make a variety of presentations based on audience, purpose of presentation, and presentation objectives.

BUS 238	INTEGRATED MANAGEMENT	3	0	0	3
Prerequisites: BUS 137					
Corequisites: None					

This course provides a management simulation exercise in which students make critical managerial decisions based upon the situations that arise in operating competitive business enterprises. Topics include operations management, forecasting, budgeting, purchasing, facility layout, aggregate planning, and work improvement techniques. Upon completion, students should be able to perform the variety of analytical and decision-making requirements that will be faced in a business.

BUS 252	LABOR RELATIONS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers the history of the organized labor movement and the contractual relationship between corporate management and employees represented by a union. Topics include labor laws and unfair labor practices, the role of the NLRB, organizational campaigns, certification/decertification elections, and grievance procedures. Upon completion, students should be able to act in a proactive and collaborative manner in an environment where union representation exists.

BUS 253	LEADERSHIP AND MANAGEMENT SKILLS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course includes a study of the qualities, behaviors, and personal styles exhibited by leaders. Emphasis is placed on coaching, counseling, team building, and employee involvement. Upon completion, students should be able to identify and exhibit the behaviors needed for organizational effectiveness.

BUS 254	ADVANCED PEOPLE SKILLS	3	0	0	3
Prerequisites: BUS 151					
Corequisites: None					

This course provides an advanced study of the concepts included in BUS 151. Topics include causes for communication breakdown, behavior styles, and advanced

	Class	Lab	Clin/ WExp	Credit Hours
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techniques for assertiveness and conflict resolution in the business environment. Upon completion, students should be able to recognize and handle conflict situations and the difficult people who create them.

BUS 256      RECRUITMENT, SELECTION, AND PERSONNEL PLANNING	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the basic principles involved in managing the employment process. Topics include personnel planning, recruiting, interviewing and screening techniques, maintaining employee records; and voluntary and involuntary separations. Upon completion, students should be able to acquire and retain employees who match position requirements and fulfill organizational objectives.

BUS 258      COMPENSATION AND BENEFITS	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course is designed to study the basic concepts of pay and its role in rewarding performance. Topics include wage and salary surveys, job analysis, job evaluation techniques, benefits, and pay-for-performance programs. Upon completion, students should be able to develop and manage a basic compensation system to attract, motivate, and retain employees.

BUS 259      HRM APPLICATIONS	3	0	0	3
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Prerequisites: BUS 217, BUS 234, BUS 256, and BUS 258  
Corequisites: None

This course provides students in the Human Resource Management concentration the opportunity to reinforce their learning experiences from preceding HRM courses. Emphasis is placed on application of day-to-day HRM functions by completing in-basket exercises and through simulations. Upon completion, students should be able to determine the appropriate actions called for by typical events that affect the status of people at work.

BUS 260      BUSINESS COMMUNICATION	3	0	0	3
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Prerequisites: ENG 111  
Corequisites: None

This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place.

BUS 270      PROFESSIONAL DEVELOPMENT	3	0	0	3
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Prerequisites: None

Corequisites: None

This course provides basic knowledge of self-improvement techniques as related to success in the professional world. Topics include positive human relations, job-seeking skills, and projecting positive self-image. Upon completion, students should be able to demonstrate competent personal and professional skills necessary to get and keep a job.

## CARPENTRY

CAR 111	CARPENTRY I	4	15	0	9
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Prerequisites: None

Corequisites: None

This course introduces the theory and construction methods associated with the building industry, including framing, materials, tools, and equipment. Topics include safety, hand/power tool use, site preparation, measurement and layout, footings and foundations, construction framing, and other related topics. Upon completion, students should be able to safely lay out and perform basic framing skills with supervision.

CAR 112	CARPENTRY II	4	15	0	9
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Prerequisites: CAR 101

Corequisites: None

This course covers the advanced theory and construction methods associated with the building industry including framing and exterior finishes. Topics include safety, hand/power tool use, measurement and layout, construction framing, exterior trim and finish, and other related topics. Upon completion, students should be able to safely frame and apply exterior finishes to a residential building with supervision.

CAR 113	CARPENTRY III	3	9	0	6
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Prerequisites: CAR 101

Corequisites: None

This course covers interior trim and finishes. Topics include safety, hand/power tool use, measurement and layout, specialty framing, interior trim and finishes, cabinetry, and other related topics. Upon completion, students should be able to safely install various interior trim and finishes in a residential building with supervision.

CAR 114	RESIDENTIAL BUILDING CODES	3	0	0	3
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Prerequisites: None

Corequisites: None

	Class	Lab	Clin/ WExp	Credit Hours
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This course covers building codes and the requirements of state and local construction regulations. Emphasis is placed on the minimum requirements of the North Carolina building codes related to residential structures. Upon completion, students should be able to determine if a structure is in compliance with North Carolina building codes.

CAR 115	RESIDENTIAL PLANNING/ESTIMATING	3	0	0	3
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Prerequisites: BPR 130  
Corequisites: None

This course covers project planning, management, and estimating for residential or light commercial buildings. Topics include planning and scheduling, interpretation of working drawings and specifications, estimating practices, and other related topics. Upon completion, students should be able to perform quantity take-offs and cost estimates.

## COMPUTED TOMOGRAPHY

CAT 210	CT PHYSICS AND EQUIPMENT	3	0	0	3
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Prerequisites: Enrollment in the CT/MRI program  
Corequisites: None

This course covers the system operations and components, image processing and display, image quality, and artifacts in computed tomography. Emphasis is placed on the data acquisition components, tissue attenuation conversions, image manipulation, and factors controlling image resolution. Upon completion, students should be able to understand the physics and instrumentation used in computed tomography.

CAT 211 -	CT PROCEDURES	4	0	0	4
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Prerequisites: Enrollment in the CT/MRI program  
Corequisites: CAT 200

This course is designed to cover specialized patient care, cross-sectional anatomy, contrast media, and scanning procedures in computed tomography. Emphasis is placed on patient assessment and monitoring, contrast agents' use, radiation safety, methods of data acquisition, and identification of cross-sectional anatomy. Upon completion, students should be able to integrate all facets of the imaging procedures in computed tomography.

CAT 231	CT CLINICAL PRACTICUM	0	0	33	11
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Prerequisites: Enrollment in CT/MRI program  
Corequisites: None

This course provides the opportunity to apply knowledge gained from classroom instruction to the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in computed tomography. Upon completion, students should be able to assume a variety of duties and responsibilities within the computed tomography clinical environment.

CAT 240	CT TOPICS	2	0	0	2
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Prerequisites: Enrollment in CT/MRI program  
Corequisites: None

This course integrates aspects of computed tomography as practiced in the classroom and clinical settings. Emphasis is placed on study skills, quality assurance, and content specifications of the ARRT advanced level exam. Upon completion, students should be able to demonstrate an understanding of the topics presented for successful completion of the ARRT exam.

## COMPUTER ENGINEERING TECHNOLOGY

CET 111	COMPUTER UPGRADE/REPAIR I	2	3	0	3
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Prerequisites: None  
Corequisites: None

This course is the first of two courses covering repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include safety practices, CPU/memory/bus identification, disk subsystem, hardware/software installation/configuration, common device drivers, data recovery, system maintenance, and other related topics. Upon completion, students should be able to safely repair and/or upgrade computer systems to perform within specifications.

CET 211	COMPUTER UPGRADE/REPAIR II	2	3	0	3
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Prerequisites: CET 111  
Corequisites: None

This course is the second of two courses covering repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include resolving resource conflicts and system bus specifications, configuration and troubleshooting peripherals, operating system configuration and optimization, and other related topics. Upon completion, students should be able to identify and resolve system conflicts and optimize system performance.

		Class	Lab	Clin/ WExp	Credit Hours
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## CHEMISTRY

Enrollment in any chemistry course more than two times requires the written permission of the Science Department chair.

CHM 094	BASIC BIOLOGICAL CHEMISTRY	3	2	0	4
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Prerequisites: MAT 060 or appropriate placement test scores

Corequisites: MAT 070 and ENG 085 or appropriate placement test score

This course introduces the chemistry important to biological processes. Emphasis is placed on the aspects of general, organic, and biological chemistry that apply to biological systems and processes. Upon completion, students should be able to demonstrate an understanding of the basic biological chemistry necessary for success in college-level biology courses.

There is an \$8.00 lab fee for this course.

CHM 130	GENERAL, ORGANIC, AND BIOCHEMISTRY	3	0	0	3
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Prerequisites: MAT 070 or appropriate placement test score

Corequisites: CHM 130A

This course provides a survey of basic facts and principles of general, organic, and biochemistry. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts. At PCC, this course and CHM 130A may be used as a prerequisite for BIO 165.

CHM 130A	GENERAL, ORGANIC, AND BIOCHEMISTRY LAB	0	2	0	1
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Prerequisites: MAT 070 or appropriate placement test scores

Corequisites: CHM 130

This course is a laboratory for CHM 130. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 130. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 130.

There is an \$8.00 lab fee for this course.

CHM 131	INTRODUCTION TO CHEMISTRY	3	0	0	3
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Prerequisites: MAT 070 or appropriate placement test scores

Corequisites: CHM 131A

This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas

laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields. At PCC, emphasis is placed on applications to health and environmental issues. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

CHM 131A	INTRODUCTION TO CHEMISTRY LAB	0	3	0	1
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Prerequisites: MAT 070 or appropriate placement test scores  
Corequisites: CHM 131

This course is a laboratory to accompany CHM 131. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

There is a \$12.00 lab fee for this course.

CHM 132	ORGANIC AND BIOCHEMISTRY	3	3	0	4
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Prerequisites: CHM 131  
Corequisites: None

This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields. At PCC, emphasis is placed on applications to health and environmental issues. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

There is a \$12.00 lab fee for this course.

## INFORMATION SYSTEMS

CIS 110	INTRODUCTION TO COMPUTERS	2	2	0	3
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Prerequisites: None  
Corequisites: None

This course provides an introduction to computers and computing. Topics include the impact of computers on society, ethical issues, and hardware/software applications, including spreadsheets, databases, word processors, graphics, the Internet, and operating systems. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and the use of the computer to solve problems. At PCC, classes may be taught nontraditionally

through telecourse distance learning or the Internet; word processing, spreadsheets, database and the Internet will be taught.

		Class	Lab	Clin/ WExp	Credit Hours
CIS 111	BASIC PC LITERACY	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course provides a brief overview of computer concepts for those who have not received credit for CIS 110. Emphasis is placed on the use of personal computers and software applications for personal and workplace use. Upon completion, students should be able to demonstrate basic personal computer skills.

CIS 113	COMPUTER BASICS	0	2	0	1
Prerequisites: None					
Corequisites: None					

This course introduces basic computer usage for non-computer majors. Emphasis is placed on developing basic personal computer skills. Upon completion, students should be able to demonstrate competence in basic computer applications sufficient to use computer-assisted instructional software.

CIS 115	INTRODUCTION TO PROGRAMMING AND LOGIC	2	2	0	3
Prerequisites: MAT 080 or MAT 090 or appropriate placement test score					
Corequisites: None					

This course introduces computer programming and problem solving in a programming environment, including an introduction to operating systems, text editor, and a language translator. Topics include language syntax, data types, program organization, problem-solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language. At PCC, this course is available through traditional classroom/lab instruction or on the Internet.

CIS 120	SPREADSHEET I	2	2	0	3
Prerequisites: CIS 110 or CIS 111					
Corequisites: None					

This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts.

CIS 121	USER SUPPORT AND SOFTWARE EVALUATION	1	4	0	3
Prerequisites: CIS 110 or CIS 111					

Corequisites: None

This course provides an opportunity to evaluate software and hardware and make recommendations to meet end-user needs. Emphasis is placed on software and hardware evaluation, installation, training, and support. Upon completion, students should be able to present proposals and make hardware and software recommendations based on their evaluations.

CIS 122	INTRODUCTION TO BUSINESS COMPUTING	2	2	0	3
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Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course provides preparation in solving business problems using computers. Topics include hardware and software concepts, the DOS operating system, Windows™, spreadsheets, and communications. Upon completion, students should be able to use DOS commands, navigate a Windows™ environment, use spreadsheet capabilities, and access information in a business environment.

CIS 130	SURVEY OF OPERATING SYSTEMS	2	3	0	3
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Prerequisites: None

Corequisites: None

The course covers operating system concepts which are necessary for maintaining and using computer systems. Topics include disk, file, and directory structures; installation and setup; resource allocation, optimization, and configuration; system security; and other related topics. Upon completion, students should be able to install and configure operating systems and optimize performance. At PCC, this course is available through traditional classroom/lab instruction or on the Internet.

CIS 147	OPERATING SYSTEM - WINDOWS™	2	2	0	3
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Prerequisites: CIS 130

Corequisites: None

This course introduces operating systems concepts for a Windows™ operating system for those who have not received credit for CIS 112. Topics include hardware management, file and memory management, system configuration/ optimization, and utilities. Upon completion, students should be able to perform operating system functions at the support level in a Windows™ environment.

CIS 148	OPERATING SYSTEM - WINDOWS™ NT 2	2		0	3
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Prerequisites: CIS 130

Corequisites: None

This course introduces operating systems concepts for the Windows™ NT operating system. Topics include hardware management, file and memory management,

system configuration/optimization, networking options, and utilities. Upon completion, students should be able to perform operating system functions at the single/multi-user support level in a Windows™ NT environment.

		Class	Lab	Clin/ WExp	Credit Hours
CIS 152	DATABASE CONCEPTS AND APPLICATIONS	2	2	0	3
Prerequisites: CIS 110, CIS 111, or CIS 115					
Corequisites: None					

This course introduces database design and creation using a DBMS product for those who have not received credit for CIS 154. Topics include database terminology, usage in industry, design theory, types of DBMS models, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to create simple database tables, queries, reports, and forms which follow acceptable design practices.

CIS 153	DATABASE APPLICATIONS	2	2	0	3
Prerequisites: CIS 152					
Corequisites: None					

This course covers advanced database functions continued from CIS 152. Topics include manipulating multiple tables, advanced queries, screens and reports, linking, and command files. Upon completion, students should be able to create multiple table systems that demonstrate updates, screens, and reports representative of industry requirements.

CIS 154	DATABASE UTILIZATION	1	2	0	2
Prerequisites: CIS 110 or CIS 111					
Corequisites: None					

This course introduces basic database functions and uses for those who have not received credit for CIS 152. Emphasis is placed on database manipulation with queries, reports, forms, and some table creation. Upon completion, students should be able to enter and manipulate data from the end-user mode.

CIS 162	MULTIMEDIA PRESENTATION SOFTWARE	2	2	0	3
Prerequisites: CIS 110 or CIS 111 and CSC 139					
Corequisites: None					

This course is designed to integrate visual and audio resources using presentation software in a simple interactive multimedia project. Emphasis is placed upon design and audience considerations, general prototyping, and handling of media resources. Upon completion, students should be able to demonstrate an original interactive multimedia presentation implementing all of these resources in a professional manner. At PCC, the current authoring package is Toolbook.

		Class	Lab	Clin/ WExp	Credit Hours
CIS 165	DESKTOP PUBLISHING I	2	2	0	3
Prerequisites: CIS 110 or CIS 111					
Corequisites: None					

This course provides an introduction to desktop publishing software capabilities. Emphasis is placed on efficient use of a page layout software package to create, design, and print publications; hardware/software compatibility; and integration of specialized peripherals. Upon completion, students should be able to prepare publications given design specifications. At PCC, Adobe Pagemaker is the Desktop Publishing Software currently used.

CIS 170	TECHNICAL SUPPORT FUNCTIONS I	2	2	0	3
Prerequisites: CIS 115					
Corequisites: None					

This course introduces a variety of diagnostic and instructional tools that are used to evaluate the performance of technical support technologies. Emphasis is placed on technical support management techniques and support technologies. Upon completion, students should be able to determine the best technologies to support and solve actual technical support problems. At PCC, lab will introduce students to helpdesk support principles using telecommunications and networking tools.

CIS 172	INTRODUCTION TO THE INTERNET	2	3	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the various navigational tools and services of the Internet. Topics include using Internet protocols, search engines, file compression/decompression, FTP, e-mail, listservs, and other related topics. Upon completion, students should be able to use Internet resources, retrieve/decompress files, and use e-mail, FTP, and other Internet tools. At PCC, this course is available through traditional classroom/lab instruction or on the Internet.

CIS 173	NETWORK THEORY	2	2	0	3
Prerequisites: NET 110					
Corequisites: None					

This course examines Token Ring, Ethernet, and Arcnet networks. Topics include LAN topologies and design; cable characteristics; cable, interface cards, server, and client installation; basic management techniques; linking networks; and troubleshooting LAN problems. Upon completion, students should be able to install both hardware and software for a small client/server LAN and troubleshoot common network problems. At PCC, students will perform basic LAN administration as part of the troubleshooting component.

CIS 174	NETWORK SYSTEM MANAGER I	2	2	0	3
Prerequisites: NET 110					

				Clin/ WExp	Credit Hours
		Class	Lab		

Corequisites: None

This course covers effective network management. Topics include network file system design and security, login scripts and user menus, printing services, e-mail, and backup. Upon completion, students should be able to administer an office network system.

CIS 175	NETWORK MANAGEMENT I	2	2	0	3
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Prerequisites: NET 110

Corequisites: None

This course covers fundamental network administration and system management. Topics include accessing and configuring basic network services, managing directory services, and using network management software. Upon completion, students should be able to apply system administrator skills in developing a network management strategy.

CIS 215	HARDWARE INSTALLATION/ MAINTENANCE	2	3	0	3
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Prerequisites: CIS 110 or CIS 111 and CIS 130

Corequisites: None

This course covers the basic hardware of a personal computer, including operations and interactions with software. Topics include component identification, the memory system, peripheral installation and configuration, preventive maintenance, and diagnostics and repair. Upon completion, students should be able to select appropriate computer equipment, upgrade and maintain existing equipment, and troubleshoot and repair non-functioning personal computers.

CIS 216	SOFTWARE INSTALLATION/ MAINTENANCE	1	2	0	2
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Prerequisites: CIS 130

Corequisites: None

This course introduces the installation and troubleshooting aspects of personal computer software. Emphasis is placed on initial installation and optimization of system software, commercial programs, system configuration files, and device drivers. Upon completion, students should be able to install, upgrade, uninstall, optimize, and troubleshoot personal computer software.

CIS 226	TRENDS IN TECHNOLOGY	1	2	0	2
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Prerequisites: CIS 130

Corequisites: None

This course introduces emerging information systems technologies. Emphasis is placed on evolving technologies and trends in business and industry. Upon

completion, students should be able to articulate an understanding of the current trends and issues in emerging technologies for information systems.

CIS 244	OPERATING SYSTEM - AS/400	2	3	0	3
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Prerequisites: CIS 130

Corequisites: None

This course includes operating systems concepts for AS/400 systems. Topics include hardware management, file and memory management, system configuration/optimization, utilities, Job Control Language, and support functions. Upon completion, students should be able to perform operating system functions in an AS/400 environment.

CIS 246	OPERATING SYSTEM - UNIX	2	3	0	3
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Prerequisites: CIS 130

Corequisites: None

This course includes operating systems concepts for UNIX operating systems. Topics include hardware management, file and memory management, system configuration/optimization, utilities, and other related topics. Upon completion, students should be able to effectively use the UNIX operating system and its utilities.

CIS 274	NETWORK SYSTEM MANAGER II	2	2	0	3
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Prerequisites: CIS 174

Corequisites: None

This course is a continuation of CIS 174 focusing on advanced network management, configuration, and installation. Emphasis is placed on server configuration files, startup procedures, server protocol support, memory and performance concepts, and management and maintenance. Upon completion, students should be able to install and upgrade networks and servers for optimal performance. *This course is a unique concentration requirement in the Network Administration and Support concentration in the Information Systems program.*

CIS 275	NETWORK MANAGEMENT II	2	2	0	3
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Prerequisites: CIS 173 and CIS 175

Corequisites: None

This course is a continuation of CIS 175 focusing on advanced enterprise networks. Topics include directory service tree planning, management distribution and protection, improving network security, auditing the network, printing, networking and system administration of an Internet node. Upon completion, students should be able to manage client services and network features and optimize network performance. *This course is a unique concentration requirement in the Network Administration and Support concentration in the Information Systems program.*

CIS 279	UNIX SYSTEM ADMINISTRATION	3	3	0	4
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		Class	Lab	Clin/ WExp	Credit Hours
Prerequisites: CIS 246					
Corequisites: None					

This course provides an advanced study of the UNIX operating system for maintaining UNIX systems. Topics include administering user accounts, using back-up utilities, installing and maintaining UNIX file systems, configuring devices, controlling processes, using advanced scripts, and other related topics. Upon completion, students should be able to set up, configure, maintain, and administer a UNIX system.

CIS 282	NETWORK TECHNOLOGY	3	0	0	3
Prerequisites: CIS 173					
Corequisites: None					

This course examines concepts of network architecture. Topics include various network types, topologies, transmission methods, media and access control, the OSI model, and the protocols which operate at each level of the model. Upon completion, students should be able to design a network based on the requirements of a company. *This course is a unique concentration requirement in the Network Administration and Support concentration in the Information Systems program.*

CIS 286	SYSTEMS ANALYSIS AND DESIGN	3	0	0	3
Prerequisites: CIS 115					
Corequisites: None					

This course examines established and evolving methodologies for the analysis, design, and development of a business information system. Emphasis is placed on business systems characteristics, managing information systems projects, prototyping, CASE tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

CIS 287	NETWORK SUPPORT	2	2	0	3
Prerequisites: CIS 274 or CIS 275					
Corequisites: None					

This course provides experience using CD ROM and on-line research tools and hands-on experience for advanced hardware support and troubleshooting. Emphasis is placed on troubleshooting network adapter cards and cabling, network storage devices, the DOS workstation, and network printing. Upon completion, students should be able to analyze, diagnose, research, and fix network hardware problems. *This course is a unique concentration requirement in the Network Administration and Support concentration in the Information Systems program.*

CIS 288	SYSTEMS PROJECT	1	4	0	3
Prerequisites: CIS 286					
Corequisites: None					

This course provides an opportunity to complete a significant systems project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete project from the definition phase through implementation.

## CARDIOVASCULAR/VASCULAR INTERVENTIONAL TECHNOLOGY

CIT 211	PATIENT CARE	3	0	0	3
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Prerequisites: Enrollment in the Cardiovascular/  
Vascular Interventional Technology program

Corequisites: None

This course introduces specialized patient care and management, physiological monitoring, and general procedural considerations used within the vascular and cardiovascular environment. Emphasis is placed on patient communication, pressure measurements, ECG, specialized cardiac monitoring, intravenous therapy, sterile technique, infection control, and isolation procedures. Upon completion, students should be able to understand patient care and management and the use and function of physiological monitoring and measurement devices.

CIT 212	ANGIOGRAPHIC EQUIPMENT AND SUPPLIES	3	0	0	3
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Prerequisites: Enrollment in the Cardiovascular/  
Vascular Interventional Technology program

Corequisites: None

This course covers the specialized equipment and instrumentation, digital subtraction, and magnification image enhancement techniques used in the cardiovascular/vascular environment. Emphasis is placed on Cine cameras, automatic film changers, intensifying screens, principles of digital imaging, automatic pressure injectors, subtraction, magnification, catheters, guide wires, and needles. Upon completion, students should be able to understand principles and use of angiographic equipment and specialized imaging techniques used in the cardiovascular/vascular environment.

CIT 213	RADIOGRAPHIC PHARMACOLOGY	3	0	0	3
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Prerequisites: Enrollment in the Cardiovascular/  
Vascular Interventional Technology program

Corequisites: None

This course is designed to cover medications, contrast media, and emergency complications in the cardiovascular/vascular interventional environment. Emphasis is placed on indications, administration, and adverse reactions to medications and contrast media. Upon completion, students should be able to identify and

		Class	Lab	Clin/ WExp	Credit Hours
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understand medications and contrast agents in cardiovascular/interventional environments and their desired results.

CIT 214	VASCULAR IMAGING I	3	0	0	3
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Prerequisites: Enrollment in the Cardiovascular/  
Vascular Interventional Technology program

Corequisites: None

This course covers angiographic approaches, interventional procedures, anatomy, and imaging techniques for the peripheral, splanchnic, and renal systems. Emphasis is placed on the structure and hemodynamics of the vascular systems, filming procedures, patient positioning and tube angulations, basic pathology, and interventional devices. Upon completion, students should be able to demonstrate knowledge of each of the vascular systems and methods used to visualize this anatomy radiographically.

CIT 224	VASCULAR IMAGING II	3	0	0	3
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Prerequisites: Enrollment in the Cardiovascular/  
Vascular Interventional Technology program

Corequisites: None

This course covers angiographic approaches, interventional procedures, anatomy, and imaging techniques for the pulmonary, cardiovascular, and cerebral systems. Emphasis is placed on the structure and hemodynamics of the vascular systems, filming procedures, patient positioning and tube angulations, basic pathology, and interventional devices. Upon completion, students should be able to demonstrate knowledge of each of the vascular systems and methods used to visualize this anatomy radiographically.

CIT 230	CIT CLINICAL PRACTICUM I	0	0	21	7
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Prerequisites: Enrollment in the Cardiovascular/  
Vascular Interventional Technology program

Corequisites: None

This course provides the opportunity to apply knowledge gained from didactic instruction to the cardiovascular/vascular interventional clinical environment. Emphasis is placed on patient care and positioning, imaging procedures, and image production in angiography within the cardiovascular/vascular interventional environment. Upon completion, students should be able to assume a variety of duties and responsibilities in the cardiovascular/vascular interventional environment.

CIT 240	CIT CLINICAL PRACTICUM II	0	0	21	7
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Prerequisites: Enrollment in the Cardiovascular/  
Vascular Interventional Technology program

Corequisites: None

This course provides the opportunity to apply knowledge gained from didactic instruction to the cardiovascular/vascular interventional clinical environment. Emphasis is placed on patient care and positioning, imaging procedures, and image production in angiography within the cardiovascular/vascular interventional environment. Upon completion, students should be able to assume a variety of duties and responsibilities in the cardiovascular/vascular interventional environment.

CIT 250	CIT CLINICAL PRACTICUM III	0	0	24	8
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Prerequisites: Enrollment in the Cardiovascular/  
Vascular Interventional Technology program

Corequisites: None

This course provides the opportunity to apply knowledge gained from didactic instruction to the cardiovascular/vascular interventional clinical environment. Emphasis is placed on patient care and positioning, imaging procedures, and image production in angiography within the cardiovascular/vascular interventional environment. Upon completion, students should be able to assume a variety of duties and responsibilities in the cardiovascular/vascular interventional environment.

## CIVIL ENGINEERING

CIV 110	STATICS AND STRENGTH OF MATERIALS	2	6	0	4
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Prerequisites: MAT 121

Corequisites: None

This course includes vector analysis, equilibrium of force systems, friction, sectional properties, stress/strain, and deformation. Topics include resultants and components of forces, moments and couples, free-body diagrams, shear and moment diagrams, trusses, frames, beams, columns, connections, and combined stresses. Upon completion, students should be able to analyze simple structures.

CIV 111	SOILS AND FOUNDATIONS	2	3	0	3
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Prerequisites: CIV 110

Corequisites: None

This course presents an overview of soil as a construction material using both analysis and testing procedures. Topics include index properties, classification, stress analysis, compressibility, compaction, dewatering, excavation, stabilization, settlement, and foundations. Upon completion, students should be able to perform basic soil tests and analyze engineering properties of soil.

CIV 125	CIVIL AND SURVEYING CAD	1	6	0	3
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Class	Lab	Clin/ WExp	Credit Hours
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Prerequisites: CIS 111, EGR 115, and SRV 110

Corequisites: None

This course introduces civil/surveying computer-aided drafting (CAD) software. Topics include drawing, editing, and dimensioning commands; plotting; and other related civil/surveying topics. Upon completion, students should be able to produce civil/surveying drawings using CAD software.

CIV 210	ENGINEERING MATERIALS	1	3	0	2
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Prerequisites: None

Corequisites: None

This course covers the behavior and properties of Portland cement and asphaltic concretes and laboratory and field testing. Topics include cementing agents and aggregates; water and admixtures; proportioning, production, placing, consolidation, and curing; and inspection methods. Upon completion, students should be able to proportion concrete mixes to attain predetermined strengths and other properties and perform standard control tests.

CIV 211	HYDRAULICS AND HYDROLOGY	2	3	0	3
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Prerequisites: CIV 110 or MEC 250

Corequisites: None

This course introduces the basic engineering principles and characteristics of hydraulics and hydrology. Topics include precipitation and runoff, fluid statics and dynamics, flow measurement, and pipe and open channel flow. Upon completion, students should be able to analyze and size drainage structures.

CIV 212	ENVIRONMENTAL PLANNING	2	3	0	3
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Prerequisites: CIV 211

Corequisites: None

This course covers water and wastewater technology, erosion and sedimentation control, and other related topics. Topics include collection, treatment, and distribution of water and wastewater and erosion and sedimentation control law. Upon completion, students should be able to demonstrate knowledge of water and wastewater systems and prepare erosion and sedimentation control plans.

## CRIMINAL JUSTICE

CJC 100	BASIC LAW ENFORCEMENT TRAINING	9	27	0	18
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Prerequisites: None

Corequisites: None

This course covers the skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Emphasis is placed on topics and areas as defined by the North Carolina Administrative Code. Upon completion, students should be able to demonstrate competence in the topics and areas required for the state comprehensive examination.

CJC 111	INTRODUCTION TO CRIMINAL JUSTICE	3	0	0	3
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Prerequisites: None

Corequisites: None

This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options.

CJC 112	CRIMINOLOGY	3	0	0	3
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Prerequisites: None

Corequisites: None

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

CJC 113	JUVENILE JUSTICE	3	0	0	3
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Prerequisites: None

Corequisites: None

This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/detention of juveniles, and case disposition.

CJC 114	INVESTIGATIVE PHOTOGRAPHY	1	2	0	2
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Prerequisites: None

Corequisites: None

This course covers the operation of various photographic equipment and its application to criminal justice. Topics include using various cameras, proper exposure of film, developing film/prints, and preparing photographic evidence. Upon completion, students should be able to demonstrate and explain the role of photography and proper film exposure and development techniques.

		Class	Lab	Clin/ WExp	Credit Hours
CJC 120	INTERVIEWS/INTERROGATIONS	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course covers basic and special techniques employed in criminal justice interviews and interrogations. Emphasis is placed on the interview/interrogation process, including interpretation of verbal and physical behavior and legal perspectives. Upon completion, students should be able to conduct interviews/interrogations in a legal, efficient, and professional manner and obtain the truth from suspects, witnesses, and victims.

CJC 121	LAW ENFORCEMENT OPERATIONS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations.

CJC 122	COMMUNITY POLICING	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers the historical, philosophical, and practical dimensions of community policing. Emphasis is placed on the empowerment of police and the community to find solutions to problems by forming partnerships. Upon completion, students should be able to define community policing, describe how community policing strategies solve problems, and compare community policing to traditional policing.

CJC 131	CRIMINAL LAW	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

CJC 132	COURT PROCEDURE AND EVIDENCE	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of

evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

CJC 141	CORRECTIONS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system.

CJC 211	COUNSELING	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the basic elements of counseling and specific techniques applicable to the criminal justice setting. Topics include observation, listening, recording, interviewing, and problem exploration necessary to form effective helping relationships. Upon completion, students should be able to discuss and demonstrate the basic techniques of counseling.

CJC 212	ETHICS AND COMMUNITY RELATIONS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

CJC 213	SUBSTANCE ABUSE	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course is a study of substance abuse in our society. Topics include the history and classifications of drug abuse and the social, physical, and psychological impact of drug abuse. Upon completion, students should be able to identify various types of drugs, their effects on human behavior and society, and treatment modalities.

		Class	Lab	Clin/ WExp	Credit Hours
	and current victim assistance programs.				
CJC 215	ORGANIZATION AND ADMINISTRATION	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the components and functions of organization and administration as it applies to the agencies of the criminal justice system. Topics include operations/functions of organizations; recruiting, training, and retention of personnel; funding and budgeting; communications; span of control and discretion; and other related topics. Upon completion, students should be able to identify and discuss the basic components and functions of a criminal justice organization and its administrative operations.

CJC 221	INVESTIGATIVE PRINCIPLES	3	2	0	4
Prerequisites: None					
Corequisites: None					

This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

CJC 222	CRIMINALISTICS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers the functions of the forensic laboratory and its relationship to successful criminal investigations and prosecutions. Topics include advanced crime scene processing, investigative techniques, current forensic technologies, and other related topics. Upon completion, students should be able to identify and collect relevant evidence at simulated crime scenes and request appropriate laboratory analysis of submitted evidence.

CJC 223	ORGANIZED CRIME	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the evolution of traditional and non-traditional organized crime and its effect on society and the criminal justice system. Topics include identifying individuals and groups involved in organized crime, areas of criminal activity, legal and political responses to organized crime, and other related topics. Upon completion, students should be able to identify the groups and activities involved in organized crime and the responses of the criminal justice system.

		Class	Lab	Clin/ WExp	Credit Hours
CJC 231	CONSTITUTIONAL LAW	3	0	0	3
Prerequisites: None					
Corequisites: None					

The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts.

CJC 233	CORRECTIONAL LAW	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces statutory/case law pertinent to correctional concepts, facilities, and related practices. Topics include examination of major legal issues encompassing incarceration, probation, parole, restitution, pardon, restoration of rights, and other related topics. Upon completion, students should be able to identify/discuss legal issues which directly affect correctional systems and personnel.

CJC 241	COMMUNITY-BASED CORRECTIONS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-incarceration situations. Topics include offenders, diversion, house arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify/discuss the various programs from the perspective of the criminal justice professional, the offender, and the community.

## COOPERATIVE EDUCATION

COE 111	CO-OP WORK EXPERIENCE I	0	0	10	1
Prerequisites: None					
Corequisites: None					

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and

		Class	Lab	Clin/ WExp	Credit Hours
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atisfactorily perform work-related competencies. At PCC, course prerequisites are  
et by each department.

OE 112	CO-OP WORK EXPERIENCE I	0	0	20	2
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rerequisites: None  
orequisites: None

his course provides work experience with a college approved employer in an area  
elated to the student's program of study. Emphasis is placed on integrating  
lassroom learning with related work experience. Upon completion, students  
ould be able to evaluate career selection, demonstrate employability skills, and  
atisfactorily perform work-related competencies. At PCC, course prerequisites are  
et by each department.

OE 113	CO-OP WORK EXPERIENCE I	0	0	30	3
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rerequisites: None  
orequisites: None

his course provides work experience with a college-approved employer in an area  
elated to the student's program of study. Emphasis is placed on integrating  
lassroom learning with related work experience. Upon completion, students  
ould be able to evaluate career selection, demonstrate employability skills, and  
atisfactorily perform work-related competencies. At PCC, course prerequisites are  
et by each department.

OE 114	CO-OP WORK EXPERIENCE I	0	0	40	4
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rerequisites: None  
orequisites: None

his course provides work experience with a college-approved employer in an area  
elated to the student's program of study. Emphasis is placed on integrating  
lassroom learning with related work experience. Upon completion, students  
ould be able to evaluate career selection, demonstrate employability skills, and  
atisfactorily perform work-related competencies. At PCC, course prerequisites are  
et by each department.

OE 115	WORK EXPERIENCE SEMINAR I	1	0	0	1
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rerequisites: None  
orequisites: COE 111, COE 112, COE 113, or COE 114

At PCC, the course description is written by the individual departments.

OE 121	CO-OP WORK EXPERIENCE II	0	0	10	1
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rerequisites: None  
orequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. At PCC, course prerequisites are set by each department.

COE 122	CO-OP WORK EXPERIENCE II	0	0	20	2
Prerequisites: None					
Corequisites: None					

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. At PCC, course prerequisites are set by each department.

COE 123	CO-OP WORK EXPERIENCE II	0	0	30	3
Prerequisites: None					
Corequisites: None					

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. At PCC, course prerequisites are set by each department.

COE 124	CO-OP WORK EXPERIENCE II	0	0	40	4
Prerequisites: None					
Corequisites: None					

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. At PCC, course prerequisites are set by each department.

COE 125	WORK EXPERIENCE SEMINAR II	1	0	0	1
Prerequisites: None					
Corequisites: COE 121, COE 122, COE 123, or COE 124					

At PCC, the course description is written by the individual departments.

		Class	Lab	Clin/ WExp	Credit Hours
COE 131	CO-OP WORK EXPERIENCE III	0	0	10	1
Prerequisites: None					
Corequisites: None					

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. At PCC, course prerequisites are met by each department.

COE 132	CO-OP WORK EXPERIENCE III	0	0	20	2
Prerequisites: None					
Corequisites: None					

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. At PCC, course prerequisites are met by each department.

COE 133	CO-OP WORK EXPERIENCE III	0	0	30	3
Prerequisites: None					
Corequisites: None					

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. At PCC, course prerequisites are met by each department.

COE 134	CO-OP WORK EXPERIENCE III	0	0	40	4
Prerequisites: None					
Corequisites: None					

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. At PCC, course prerequisites are met by each department.

COE 135	WORK EXPERIENCE SEMINAR III	1	0	0	1
Prerequisites: None					

Corequisites: COE 131, COE 132, COE 133, or COE 134

At PCC, the course description is written by the individual departments.

## COMMUNICATION

COM 110	INTRODUCTION TO COMMUNICATION	3	0	0	3
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Prerequisites: None

Corequisites: None

This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in speech/communication.*

COM 120	INTERPERSONAL COMMUNICATION	3	0	0	3
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Prerequisites: None

Corequisites: None

This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in speech/communication.*

COM 231	PUBLIC SPEAKING	3	0	0	3
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Prerequisites: None

Corequisites: None

This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in speech/communication.*

## COSMETOLOGY

COS 111	COSMETOLOGY CONCEPTS I	4	0	0	4
Prerequisites: None					
Corequisites: COS 112					

This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

COS 112	SALON I	0	24	0	8
Prerequisites: None					
Corequisites: COS 111					

This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

COS 113	COSMETOLOGY CONCEPTS II	4	0	0	4
Prerequisites: None					
Corequisites: COS 114					

This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

COS 114	SALON II	0	24	0	8
Prerequisites: None					
Corequisites: COS 113					

This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS 115	COSMETOLOGY CONCEPTS III	4	0	0	4
Prerequisites: None					
Corequisites: COS 116					

This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting,

superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

COS 116	SALON III	0	12	0	4
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Prerequisites: None  
Corequisites: COS 115

This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS 117	COSMETOLOGY CONCEPTS IV	2	0	0	2
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Prerequisites: None  
Corequisites: COS 118

This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

COS 118	SALON IV	0	21	0	7
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Prerequisites: COS 114 and COS 116  
Corequisites: COS 117

This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements.

COS 120	ESTHETICS	1	3	0	2
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Prerequisites: None  
Corequisites: None

This course covers the concepts and techniques of esthetics. Topics include safety, skin care, make-up, aromatherapy, massage, and superfluous hair removal. Upon completion, students should be able to perform professional skin care and make-up services.

COS 123	CONTEMP HAIR COLORING	1	3	0	2
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Prerequisites: COS 111 and COS 112

Corequisites: None

This course covers basic color concepts, hair coloring problems, and application techniques.

Topics include color theory, terminology, contemporary techniques, product knowledge, and other related topics. Upon completion, students should be able to identify a client's color needs and safely and competently perform color applications and correct problems.

COS 124	TRICHOLOGY AND CHEMISTRY	1	3	0	2
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Prerequisites: None

Corequisites: None

This course is a study of hair and the interaction of applied chemicals. Emphasis is placed on pH actions and the reactions and effects of chemical ingredients. Upon completion, students should be able to demonstrate an understanding of chemical terminology, pH testing, and chemical reactions on hair.

COS 140	CONTEMPORARY DESIGN	1	3	0	2
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Prerequisites: COS 111 and COS 112

Corequisites: None

This course covers methods and techniques for contemporary designs. Emphasis is placed on contemporary designs and other related topics. Upon completion, students should be able to demonstrate and apply techniques associated with contemporary design.

COS 150	COMPUTERIZED SALON OPS	1	0	0	1
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Prerequisites: None

Corequisites: None

This course introduces computer and salon software. Emphasis is placed on various computer and salon software applications. Upon completion, students should be able to utilize computer skills and software applications in the salon setting.

COS 160	DESIGN APPLICATIONS	1	3	0	2
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Prerequisites: None

Corequisites: None

This course provides an overview of the design concepts used in cosmetology. Topics include the application of art principles and elements to artistically design hair, nails, and make-up and other related topics. Upon completion, students should be able to demonstrate knowledge and techniques associated with design concepts.

## COMPUTER SCIENCE

CSC 134 C++ PROGRAMMING 2 3 0 3  
 Prerequisites: CIS 130 and CSC 143  
 Corequisites: None

This course introduces computer programming using the C++ programming language. Topics include input/output operations, iteration, arithmetic operations, arrays, pointers, filters, and other related topics. Upon completion, students should be able to design, code, test, and debug C++ language programs. At PCC, this course may use a GUI interface.

CSC 135 COBOL PROGRAMMING 2 3 0 3  
 Prerequisites: CIS 115  
 Corequisites: None

This course introduces computer programming using the COBOL programming language. Topics include input/output operations, sequence selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug COBOL language programs. At PCC, this course is taught on the AS/400.

CSC 138 RPG PROGRAMMING 2 3 0 3  
 Prerequisites: CIS 115  
 Corequisites: None

This course introduces computer programming using the RPG programming language. Topics include input/output operations, sequence selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug RPG language programs. At PCC, this course is taught on the AS/400.

CSC 139 VISUAL BASIC PROGRAMMING 2 3 0 3  
 Prerequisites: CIS 147 and CSC 143  
 Corequisites: None

This course introduces computer programming using the Visual BASIC programming language. Topics include input/output operations, sequence selection, iteration, arithmetic operations, arrays, forms, sequential files, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual BASIC language programs.

CSC 143 OBJECT-ORIENTED PROGRAMMING 2 3 0 3  
 Prerequisites: CIS 115  
 Corequisites: None

		Class	Lab	Clin/ WExp	Credit Hours
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This course introduces the concepts of object-oriented programming. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, test, debug, and implement objects at the application level using the appropriate environment.

CSC 234	ADVANCED C++	2	3	0	3
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Prerequisites: CSC 134  
Corequisites: None

This course is a continuation of CSC 134 using C++ with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions. At the end of the course, student will use GUI calls.

CSC 238	ADVANCED RPG	2	3	0	3
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Prerequisites: CSC 138  
Corequisites: None

This course is a continuation of CSC 138 using RPG with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

CSC 239	ADVANCED VISUAL BASIC	2	3	0	3
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Prerequisites: CSC 139  
Corequisites: None

This course is a continuation of CSC 139 using Visual BASIC with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

CSC 248	ADVANCED INTERNET PROGRAMMING	2	3	0	3
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Prerequisites: CSC 134  
Corequisites: None

This course covers advanced programming skills required to design Internet applications. Emphasis is placed on programming techniques required to support network applications. Upon completion, students should be able to design, code, test, debug, and document network-based programming solutions to various real-world problems using an appropriate programming language.

## CARDIOVASCULAR SONOGRAPHY

CVS 160	CVS CLINICAL EDUCATION I	0	0	15	5
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Prerequisites: Enrollment in the Cardiovascular Sonography program

Corequisites: CVS 163

This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS 161	CVS CLINICAL EDUCATION II	0	0	24	8
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Prerequisites: CVS 160

Corequisites: None

This course provides continued participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS 162	CVS CLINICAL EDUCATION III	0	0	15	5
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Prerequisites: CVS 161

Corequisites: None

This course provides continued participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS 163	ECHO I	3	2	0	4
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Prerequisites: Enrollment in the Cardiovascular Sonography program

Corequisites: None

This course covers cardiac anatomy and introduces cardiac scanning techniques. Topics include normal cardiac anatomy, Doppler physics, and 2-D and M-mode imaging. Upon completion, students should be able to perform 2-D and M-mode studies.

CVS 164	ECHO II	3	2	0	4
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Prerequisites: CVS 163

Corequisites: None

This course is a continuation of CVS 163 with continued study of 2-D and M-mode imaging. Emphasis is placed on continuous wave, pulsed wave, color, and power Doppler imaging of normal and abnormal cardiac conditions. Upon completion, students should be able to perform and recognize normal and abnormal cardiac studies.

		Class	Lab	Clin/ WExp	Credit Hours
CVS 260	CVS CLINICAL EDUCATION IV	0	0	24	8
Prerequisites: CVS 162					
Corequisites: None					

This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS 261	CVS CLINICAL EDUCATION V	0	0	24	8
Prerequisites: CVS 260					
Corequisites: None					

This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS 277	CARDIOVASCULAR TOPICS	2	0	0	2
Prerequisites: CVS 260					
Corequisites: CVS 261					

This course provides an overview of cardiovascular topics in preparation for certification examinations. Emphasis is placed on registry preparation. Upon completion, students should be able to sit for the registry examinations.

## DRAFTING

DFT 117	TECHNICAL DRAFTING	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course introduces basic drafting practices for non-drafting majors. Emphasis is placed on instrument use and care, shape and size description, sketching, and pictorials. Upon completion, students should be able to produce drawings of assigned parts.

DFT 119	BASIC CAD	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course introduces computer-aided drafting software for specific technologies to non-drafting majors. Emphasis is placed on understanding the software command structure and drafting standards for specific technical fields. Upon completion, students should be able to create and plot basic drawings.

## DRAMA

DRA 111	THEATRE APPRECIATION	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience's appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

DRA 112	LITERATURE OF THE THEATRE	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course provides a survey of dramatic works from the classical Greek through the present. Emphasis is placed on the language of drama, critical theory, and background as well as on play reading and analysis. Upon completion, students should be able to articulate, orally and in writing, their appreciation and understanding of dramatic works. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

DRA 122	ORAL INTERPRETATION	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the dramatistic study of literature through performance. Emphasis is placed on analysis and performance of poetry, drama, and prose fiction. Upon completion, students should be able to embody and discuss critically the speakers inherent in literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## ECONOMICS

ECO 151	SURVEY OF ECONOMICS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces basic concepts of micro- and macroeconomics. Topics include supply and demand, optimizing economic behavior, prices and wages, money, interest rates, banking system, unemployment, inflation, taxes, government

	Class	Lab	Clin/ WExp	Credit Hours
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pending, and international trade. Upon completion, students should be able to explain alternative solutions for economic problems faced by private and government sectors. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

ECO 251	PRINCIPLES OF MICROECONOMICS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces economic analysis of individual, business, and industry choices in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

ECO 252	PRINCIPLES OF MACROECONOMICS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course, for those who have not received credit for ECO 151, introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

## EDUCATION

EDU 111	EARLY CHILDHOOD CREDENTIAL I	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course introduces early childhood education and the role of the teacher in environments that encourage exploration and learning. Topics include professionalism, child growth and development, individuality, family, and culture. Upon completion, students should be able to identify and demonstrate knowledge of professional roles, major areas of child growth and development, and diverse families.

		Class	Lab	Clin/ WExp	Credit Hours
EDU 112	EARLY CHILDHOOD CREDENTIAL II	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course introduces developmentally appropriate practices, positive guidance, and standards of health, safety, and nutrition. Topics include the learning environment, planning developmentally appropriate activities, positive guidance techniques, and health, safety, and nutrition standards. Upon completion, students should be able to demonstrate developmentally appropriate activities and positive guidance techniques and describe health/sanitation/nutrition practices that promote healthy environments for children.

EDU 113	FAMILY/EARLY CHILDHOOD CREDENTIAL	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course covers business/professional practices for family early childhood providers, developmentally appropriate practices, positive guidance, and methods of providing a safe and healthy environment. Topics include developmentally appropriate practices; health, safety and nutrition; and business and professionalism. Upon completion, students should be able to develop a handbook of policies, procedures, and practices for a family child care home.

EDU 119	EARLY CHILDHOOD EDUCATION	3	2	0	4
Prerequisites: None					
Corequisites: None					

This course covers the foundations of the education profession, types of programs, professionalism, and planning quality programs for children. Topics include historical foundations, career options, types of programs, professionalism, observational skills, and planning developmentally appropriate schedules, environments, and activities for children. Upon completion, students should be able to demonstrate observational skills, identify appropriate schedules and environments, develop activity plans, and describe influences on the profession.

EDU 131	CHILD, FAMILY, AND COMMUNITY	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers the relationships between the families, programs for children/schools, and the community. Emphasis is placed on establishing and maintaining positive collaborative relationships with families and community resources. Upon completion, students should be able to demonstrate strategies for effectively working with diverse families and identifying and utilizing community resources.

		Class	Lab	Clin/ WExp	Credit Hours
EDU 146	CHILD GUIDANCE	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces practical principles and techniques for developmentally appropriate guidance. Emphasis is placed on encouraging self-esteem and cultural awareness, effective communication skills, and direct and indirect guidance techniques and strategies. Upon completion, students should be able to demonstrate strategies which encourage positive social interactions, promote conflict resolution, and develop self-control, self-motivation, and self-esteem in children.

EDU 151	CREATIVE ACTIVITIES	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers creative learning environments, planning and implementing developmentally appropriate experiences, and developing appropriate teaching materials for the classroom. Emphasis is placed on creative activities for children in art, music, movement and physical skills, and dramatics. Upon completion, students should be able to select and evaluate developmentally appropriate learning materials and activities.

EDU 151A	CREATIVE ACTIVITIES LAB	0	2	0	1
Prerequisites: None					
Corequisites: EDU 151					

This course provides a laboratory component to complement EDU 151. Emphasis is placed on practical experiences that enhance concepts introduced in the classroom. Upon completion, students should be able to demonstrate a practical understanding of the development and implementation of appropriate creative activities.

EDU 153	HEALTH, SAFETY, AND NUTRITION	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course focuses on promoting and maintaining the health and well-being of children. Topics include health and nutritional needs, safe and healthy environments, and recognition and reporting of child abuse and neglect. Upon completion, students should be able to set up and monitor safe indoor and outdoor environments and implement a nutrition education program.

EDU 161	INTRODUCTION TO EXCEPTIONAL CHILDREN	3	3	0	4
Prerequisites: None					
Corequisites: None					

This course covers exceptional children as learners within the context of the community, school, and family. Emphasis is placed on the legal, social, physical, political, and cultural issues relating to the analysis and teaching of exceptional children. Upon completion, students should be able to demonstrate knowledge of identification processes, mainstreaming techniques, and professional practices and attitudes.

EDU 162	EARLY EXPERIENCES/ PROSPECTIVE TEACHERS	1	2	0	2
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Prerequisites: None

Corequisites: None

This course provides an opportunity to observe teachers and pupils in a natural classroom environment. Emphasis is placed on observation methods, planning, teaching, evaluation, personal goal assessment, and curriculum. Upon completion, students should be able to demonstrate an understanding of their own personal teaching goals, teaching methods, planning methods, and student performance evaluation.

EDU 188	ISSUES IN EARLY CHILDHOOD EDUCATION	2	0	0	2
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Prerequisites: None

Corequisites: None

This course covers topics and issues in early childhood education. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain current topics and issues in early childhood education.

EDU 221	CHILDREN WITH SPECIAL NEEDS	3	0	0	3
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Prerequisites: EDU 111 and PSY 244

Corequisites: None

This course introduces working with children with special needs. Emphasis is placed on the characteristics and assessment of children and strategies for adapting the home and classroom environment. Upon completion, students should be able to recognize atypical development, make appropriate referrals, and work collaboratively to plan, implement, and evaluate inclusion strategies.

EDU 234	INFANTS, TODDLERS, AND TWOS	3	0	0	3
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Prerequisites: None

Corequisites: None

This course covers the skills needed to effectively implement group care for infants, toddlers, and two-year olds. Emphasis is placed on child development and developmentally appropriate practices. Upon completion, students should be able

		Class	Lab	Clin/ WExp	Credit Hours
to identify, plan, select materials and equipment, and implement and evaluate a developmentally appropriate curriculum.					
EDU 251	EXPLORATION ACTIVITIES	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers discovery experiences in science, math, and social studies. Emphasis is placed on developing concepts for each area and encouraging young children to explore, discover, and construct concepts. Upon completion, students should be able to discuss the discovery approach to teaching, explain major concepts in each area, and plan appropriate experiences for children.

EDU 251A	EXPLORATION ACTIVITIES LAB	0	2	0	1
Prerequisites: None					
Corequisites: EDU 251					

This course provides a laboratory component to complement EDU 251. Emphasis is placed on practical experiences that enhance concepts introduced in the classroom. Upon completion, students should be able to demonstrate a practical understanding of the development and implementation of appropriate science, math, and social studies activities for children.

EDU 259	CURRICULUM PLANNING	3	0	0	3
Prerequisites: EDU 112					
Corequisites: None					

This course covers early childhood curriculum planning. Topics include philosophy, curriculum, indoor and outdoor environmental design, scheduling, observation and assessment, and instructional planning and evaluation. Upon completion, students should be able to assess children and curriculum; plan for daily, weekly, and long-range instruction; and design environments with appropriate equipment and supplies.

EDU 261	EARLY CHILDHOOD ADMINISTRATION I	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course covers the policies, procedures, and responsibilities for the management of early childhood education programs. Topics include implementation of goals, principles of supervision, budgeting and financial management, and meeting the standards for a NC Child Day Care license. Upon completion, students should be able to develop program goals, explain licensing standards, determine budgeting needs, and describe effective methods of personnel supervision.

		Class	Lab	Clin/ WExp	Credit Hours
EDU 282	EARLY CHILDHOOD LITERATURE	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers the history, selection, and integration of literature and language in the early childhood curriculum. Topics include the history and selection of developmentally appropriate children's literature and the use of books and other media to enhance language and literacy in the classroom. Upon completion, students should be able to select appropriate books for storytelling, reading aloud, puppetry, flannel board use, and other techniques.

## **ENGINEERING**

EGR 115	INTRODUCTION TO TECHNOLOGY	2	6	0	4
Prerequisites: None					
Corequisites: None					

This course introduces the basic skills and career fields for technicians. Topics include career options, technical vocabulary, dimensional analysis, measurement systems, engineering graphics, calculator applications, professional ethics, safety practices, and other related topics. Upon completion, students should be able to demonstrate an understanding of the basic technologies, prepare drawings and sketches, and perform computations using a scientific calculator.

## **ELECTRICITY**

ELC 111	INTRODUCTION TO ELECTRICITY	2	2	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the fundamental concepts of electricity and test equipment to non-electrical/electronic majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

ELC 112	DC/AC ELECTRICITY	3	6	0	5
Prerequisites: None					
Corequisites: None					

This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation

		Class	Lab	Clin/ WExp	Credit Hours
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of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

ELC 113	BASIC WIRING I	2	6	0	4
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Prerequisites: None  
Corequisites: None

This course introduces the care/usage of tools and materials used in electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical blueprint reading; planning, layout; and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with basic electrical installations.

ELC 114	BASIC WIRING II	2	6	0	4
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Prerequisites: ELC 113  
Corequisites: None

This course provides additional instruction in the application of electrical tools, materials, and test equipment associated with electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with electrical installations.

ELC 115	INDUSTRIAL WIRING	2	6	0	4
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Prerequisites: ELC 113  
Corequisites: None

This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment.

ELC 117	MOTORS AND CONTROLS	2	6	0	4
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Prerequisites: ELC 112 or ELC 131  
Corequisites: None

This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contractors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

ELC 118	NATIONAL ELECTRICAL CODE	1	2	0	2
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Prerequisites: None  
Corequisites: None

This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

ELC 121	ELECTRICAL ESTIMATING	1	2	0	2
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Prerequisites: ELC 113  
Corequisites: None

This course covers the principles involved in estimating electrical projects. Topics include take-offs of materials and equipment, labor, overhead, and profit. Upon completion, students should be able to estimate simple electrical projects.

ELC 125	DIAGRAMS AND SCHEMATICS	1	2	0	2
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Prerequisites: None  
Corequisites: None

This course covers the interpretation of electrical diagrams, schematics, and drawings common to electrical applications. Emphasis is placed on reading and interpreting electrical diagrams and schematics. Upon completion, students should be able to read and interpret electrical diagrams and schematics.

ELC 128	INTRODUCTION TO PLC	2	3	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLCs and create simple programs.

ELC 131	DC/AC CIRCUIT ANALYSIS	4	3	0	5
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Prerequisites: None  
Corequisites: MAT 121

This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation software, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment.

ELC 140	FUNDAMENTALS OF DC/AC CIRCUITS	5	6	0	7
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Prerequisites: None

		Class	Lab	Clin/ WExp	Credit Hours
Prerequisites: None					
This course covers the principles of DC/AC circuit analysis as applied to electronics. Topics include atomic theory, circuit analysis, components, test equipment, troubleshooting techniques, schematics, diagrams, and other related topics. Upon completion, students should be able to interpret, construct, verify, analyze, and troubleshoot DC/AC circuits in a safe manner.					
ELC 213	INSTRUMENTATION	3	2	0	4
Prerequisites: ELC 111, ELC 112, or ELC 131					
Prerequisites: None					
This course covers the fundamentals of instrumentation used in industry. Emphasis is placed on electric, electronic, and pneumatic instruments. Upon completion, students should be able to design, install, maintain, and calibrate instrumentation.					
ELC 228	PLC APPLICATIONS	2	6	0	4
Prerequisites: ELC 128					
Prerequisites: None					
This course continues the study of the programming and applications of programmable logic controllers. Emphasis is placed on advanced programming, networking, advanced I/O modules, reading and interpreting error codes, and troubleshooting. Upon completion, students should be able to program and troubleshoot programmable logic controllers.					
ELC 240	HEAVY CONSTRUCTION WIRING	2	6	0	4
Prerequisites: ELC 113					
Prerequisites: None					
This course introduces the installation of power distribution systems consisting of large conduits, raceways, and associated devices and equipment for industrial sites. Emphasis is placed on installation practices for large conduits, raceways, power distribution systems and controls, termination of large conductors, and other related topics. Upon completion, students should be able to install large-size power distribution systems and equipment in an industrial facility in accordance with accepted practices.					
ELC 241	ELECTRICAL SYSTEM COMMISSIONING	2	3	0	3
Prerequisites: ELC 112					
Prerequisites: None					
This course covers practical applications in the modification, expansion, installation, and commissioning of electrical/electronic systems in heavy industrial sites.					

Emphasis is placed on compatibility, performance of intended function, code compliance, operation of electrical/electronic systems in industry, and other related topics. Upon completion, students should be able to complete basic functions necessary to commission new or modified electrical/electronic systems, delivering functional systems to the user.

## ELECTRONICS

ELN 131	ELECTRONIC DEVICES	3	3	0	4
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Prerequisites: ELC 112, ELC 131, or ELC 140  
Corequisites: None

This course includes semiconductor-based devices such as diodes, bipolar transistors, FETs, thyristors, and related components. Emphasis is placed on analysis, selection, biasing, and applications in power supplies, small signal amplifiers, and switching and control circuits. Upon completion, students should be able to construct, analyze, verify, and troubleshoot discrete component circuits using appropriate techniques and test equipment.

ELN 132	LINEAR IC APPLICATIONS	3	3	0	4
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Prerequisites: ELN 131  
Corequisites: None

This course introduces the characteristics and applications of linear integrated circuits. Topics include op-amp circuits, differential amplifiers, instrumentation amplifiers, waveform generators, active filters, PLLs, and IC voltage regulators. Upon completion, students should be able to construct, analyze, verify, and troubleshoot linear integrated circuits using appropriate techniques and test equipment.

ELN 133	DIGITAL ELECTRONICS	3	3	0	4
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Prerequisites: ELC 112, ELC 131, ELC 140, or ELN 111  
Corequisites: None

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC converters, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

ELN 140	SEMICONDUCTOR DEVICES	4	6	0	6
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Prerequisites: None  
Corequisites: None

This course covers semiconductor devices and circuits as they apply to the area of electronic servicing. Topics include semiconductor theory, diodes, transistors, linear integrated circuits, biasing, amplifiers, power supplies, and other related topics. Upon completion, students should be able to construct, verify, analyze, and troubleshoot semiconductor circuits.

ELN 141	DIGITAL FUNDAMENTALS	4	6	0	6
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Prerequisites: None  
Corequisites: None

This course covers combinational and sequential logic circuits. Topics include number systems, logic elements, Boolean algebra, Demorgan's theorem, logic families, flip flops, registers, counters, and other related topics. Upon completion, students should be able to analyze, verify, and troubleshoot digital circuits.

ELN 142	VIDEO SYSTEMS	7	9	0	10
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Prerequisites: ELN 140  
Corequisites: None

This course provides a detailed study of the operation and repair of television, VCR, and other video systems. Topics include the operation, alignment, and repair of video systems. Upon completion, students should be able to troubleshoot, maintain, and repair video systems.

ELN 229	INDUSTRIAL ELECTRONICS	2	4	0	4
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Prerequisites: ELC 112, ELC 131, or ELC 140  
Corequisites: None

This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices (filters, rectifiers, FET, SCR, Diac, Triac, Op-amps, etc). Upon completion, students should be able to install and/or troubleshoot these devices for proper operation in an industrial electronic circuit.

ELN 231	INDUSTRIAL CONTROLS	2	3	0	3
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Prerequisites: ELC 112, ELC 131, or ELC 140  
Corequisites: None

This course introduces the fundamental concepts of solid-state control of rotating machinery and associated peripheral devices. Topics include rotating machine theory, ladder logic, electromechanical and solid state relays, motor controls, pilot devices, three-phase power systems, and other related topics. Upon completion, students should be able to interpret ladder diagrams and demonstrate an understanding of electromechanical and electronic control of rotating machinery.

		Class	Lab	Clin/ WExp	Credit Hours
ELN 232	INTRODUCTION TO MICROPROCESSORS	3	3	0	4
Prerequisites: ELN 133					
Corequisites: None					

This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include assembly language programming, bus architecture, bus cycle types, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment.

ELN 234	COMMUNICATION SYSTEMS	3	3	0	4
Prerequisites: ELN 132 or ELN 140					
Corequisites: None					

This course introduces the fundamentals of electronic communication systems. Topics include the frequency spectrum, electrical noise, modulation techniques, characteristics of transmitters and receivers, and digital communications. Upon completion, students should be able to interpret analog and digital communication circuit diagrams, analyze transmitter and receiver circuits, and use appropriate communication test equipment.

ELN 235	DATA COMMUNICATION SYSTEMS	3	3	0	4
Prerequisites: ELN 133					
Corequisites: None					

This course covers data communication systems and the transmission of digital information from source to destination. Topics include data transmission systems, serial interfaces and modems, protocols, networks, and other related topics. Upon completion, students should be able to demonstrate knowledge of the concepts associated with data communication systems.

ELN 242	AUDIO SERVICING	2	3	0	3
Prerequisites: ELC 140					
Corequisites: ELN 140					

This course covers the installation, maintenance, troubleshooting, and repair of consumer audio equipment. Topics include the theory, operation, and maintenance of audio equipment. Upon completion, students should be able to maintain, troubleshoot, and repair consumer audio equipment.

ELN 243	COMMUNICATION ELECTRONICS	2	3	0	3
Prerequisites: ELC 140					
Corequisites: ELN 140					

		Class	Lab	Clin/ WExp	Credit Hours
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This course covers the installation, maintenance, troubleshooting, and repair of electronic communications equipment. Topics include the theory, operation, and maintenance of electronic communications equipment. Upon completion, students should be able to maintain, troubleshoot, and repair electronic communications equipment.

ELN 275	TROUBLESHOOTING	1	2	0	2
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Prerequisites: None  
Corequisites: ELN 133 or ELN 141

This course covers techniques of analyzing and repairing failures in electronic equipment. Topics include safety, signal tracing, use of service manuals, and specific troubleshooting methods for analog, digital, and other electronics-based circuits and systems. Upon completion, students should be able to logically diagnose and isolate faults and perform necessary repairs to meet manufacturers' specifications.

## ENGLISH

ENG 060	SPEAKING ENGLISH WELL	2	0	0	2
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Prerequisites: None  
Corequisites: None

This course is designed to improve conversational skills. Emphasis is placed on practice using fluent standard spoken English. Upon completion, students should be able to converse comfortably in a variety of situations.

ENG 070	BASIC LANGUAGE SKILLS	2	2	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the fundamentals of standard written English. Emphasis is placed on effective word choice, recognition of sentences and sentence parts, and basic usage. Upon completion, students should be able to generate a variety of sentence types that clearly express ideas.

ENG 085	READING AND WRITING FOUNDATIONS	5	0	0	5
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Prerequisites: ENG 070 and RED 070 or appropriate placement test score  
Corequisites: None

This course uses whole language to develop proficiency in reading and writing for college. Emphasis is placed on applying analytical and critical reading skills to a variety of texts and on introducing the writing process. Upon completion, students

should be able to recognize and use various patterns of text organization and compose effective paragraphs.

ENG 085A	READING AND LANGUAGE FOUNDATIONS LAB	0	2	0	1
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Prerequisites: ENG 070 and RED 070 or appropriate placement test score

Corequisites: ENG 085

This laboratory provides the opportunity to practice the skills introduced in ENG 085. Emphasis is placed on practical skills for applying analytical and critical reading skills to a variety of texts and on the writing process. Upon completion, students should be able to apply those skills in the production of effective paragraphs.

ENG 095	READING AND COMPOSITION STRATEGIES	5	0	0	5
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Prerequisites: ENG 085 or appropriate placement test score

Corequisites: None

This course uses whole language to strengthen proficiency in reading and writing for college. Emphasis is placed on applying critical reading skills to narrative and expository texts and on using the writing process. Upon completion, students should be able to comprehend, analyze, and evaluate college texts and to compose essays in preparation for college writing.

ENG 095A	READING AND COMPOSITION STRATEGIES LAB	0	2	0	1
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Prerequisites: ENG 070 and RED 070 or appropriate placement test score

Corequisites: ENG 095

This laboratory provides the opportunity to practice the skills introduced in ENG 095. Emphasis is placed on practical skills for applying critical reading skills to narrative and expository texts and on the writing process. Upon completion, students should be able to apply those skills in the production of effective essays in preparation for college writing.

ENG 101	APPLIED COMMUNICATIONS I	3	0	0	3
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Prerequisites: None

Corequisites: None

This course is designed to enhance reading and writing skills for the workplace. Emphasis is placed on technical reading, job-related vocabulary, sentence writing, punctuation, and spelling. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace.

ENG 102	APPLIED COMMUNICATIONS II	3	0	0	3
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		Class	Lab	Clin/ WExp	Credit Hours
Prerequisites: None					
Corequisites: None					
<p>This course is designed to enhance writing and speaking skills for the workplace. Emphasis is placed on generating short writings such as job application documents, memoranda, and reports and developing interpersonal communication skills with employees and the public. Upon completion, students should be able to prepare effective, short, and job-related written and oral communications.</p>					
ENG 111	EXPOSITORY WRITING	3	0	0	3
Prerequisites: ENG 095 or appropriate placement test score					
Corequisites: None					
<p>This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.</i></p>					
ENG 112	ARGUMENT-BASED RESEARCH	3	0	0	3
Prerequisites: ENG 111					
Corequisites: None					
<p>This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented argumentative essays and research projects. Upon completion, students should be able to summarize, paraphrase, interpret, and synthesize information from primary and secondary sources using standard research format and style. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.</i></p>					
ENG 113	LITERATURE-BASED RESEARCH	3	0	0	3
Prerequisites: ENG 111					
Corequisites: None					
<p>This course, the second in a series of two, expands the concepts developed in ENG 111 by focusing on writing that involves literature-based research and documentation. Emphasis is placed on critical reading and thinking and the analysis and interpretation of prose, poetry, and drama: plot, characterization, theme, cultural context, etc. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.</i></p>					

		Class	Lab	Clin/ WExp	Credit Hours
ENG 114	PROFESSIONAL RESEARCH AND REPORTING	3	0	0	3
Prerequisites: ENG 111					
Corequisites: None					

This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.*

ENG 115	ORAL COMMUNICATION	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the basic principles of oral communication in both small group and public settings. Emphasis is placed on the components of the communication process, group decision-making, and public address. Upon completion, students should be able to demonstrate the principles of effective oral communication in small group and public settings. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.*

ENG 231	AMERICAN LITERATURE I	3	0	0	3
Prerequisites: ENG 112, ENG 113, or ENG 114					
Corequisites: None					

This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ENG 232	AMERICAN LITERATURE II	3	0	0	3
Prerequisites: ENG 112, ENG 113, or ENG 114					
Corequisites: None					

This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

		Class	Lab	Clin/ WExp	Credit Hours
ENG 233	MAJOR AMERICAN WRITERS	3	0	0	3
Prerequisites: ENG 112, ENG 113, or ENG 114					
Corequisites: None					

This course provides an intensive study of the works of several major American authors. Emphasis is placed on American history, culture, and the literary merits. Upon completion, students should be able to interpret, analyze, and evaluate the works studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ENG 241	BRITISH LITERATURE I	3	0	0	3
Prerequisites: ENG 112, ENG 113, or ENG 114					
Corequisites: None					

This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ENG 242	BRITISH LITERATURE II	3	0	0	3
Prerequisites: ENG 112, ENG 113, or ENG 114					
Corequisites: None					

This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ENG 243	MAJOR BRITISH WRITERS	3	0	0	3
Prerequisites: ENG 112, ENG 113, or ENG 114					
Corequisites: None					

This course provides an intensive study of the works of several major British authors. Emphasis is placed on British history, culture, and the literary merits. Upon completion, students should be able to interpret, analyze, and evaluate the works studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ENG 261	WORLD LITERATURE I	3	0	0	3
Prerequisites: ENG 112, ENG 113, or ENG 114					
Corequisites: None					

This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from their literary beginnings through the seventeenth century. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

ENG 262	WORLD LITERATURE II	3	0	0	3
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Prerequisites: ENG 112, ENG 113, or ENG 114  
Corequisites: None

This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from the eighteenth century to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## GEOGRAPHY

GEO 110	INTRODUCTION TO GEOGRAPHY	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces map reading skills and the physical and cultural features of different areas of the earth. Topics include spatial association, the importance of location, physical characteristics of the earth, and the impact of humans on the environment. Upon completion, students should be able to demonstrate an ability to read a map and describe physical and cultural features of different regions.

GEO 111	WORLD REGIONAL GEOGRAPHY	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the regional concept which emphasizes the spatial association of people and their environment. Emphasis is placed on the physical, cultural, and economic systems that interact to produce the distinct regions of the earth. Upon completion, students should be able to describe variations in physical and cultural features of a region and demonstrate an understanding of their functional relationships. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**GRAPHIC DESIGN**

GRD 110	TYPOGRAPHY I	2	2	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the history and mechanics of type and its application to layout and design. Topics include typographic fundamentals, anatomy, measurements, composition, identification, and terminology. Upon completion, students should be able to demonstrate proficiency in design application, analysis, specification, and creation of typographic elements.

GRD 113	HISTORY OF GRAPHIC DESIGN	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers the history of graphic design and visual communications. Topics include major trends, developments, influences, and directions. Upon completion, students should be able to understand, recognize, and analyze important historical and world-wide cultural influences found in today's marketing of ideas and products.

GRD 131	ILLUSTRATION I	1	3	0	2
Prerequisites: ART 131, DES 125, or GRD 121					
Corequisites: None					

This course introduces the application of rendering techniques to create illustrations. Emphasis is placed on controlling various media, methods, surfaces, design problems, and the appropriate media selection process. Upon completion, students should be able to produce quality illustrations from conception through finished artwork.

GRD 132	ILLUSTRATION II	1	3	0	2
Prerequisites: GRD 131					
Corequisites: None					

This course is a continuation of GRD 131. Topics include editorial, product, fashion, and advertising illustrations. Upon completion, students should be able to demonstrate increased proficiency in creating quality illustrations from conceptualization through finished artwork.

GRD 141	GRAPHIC DESIGN I	2	4	0	4
Prerequisites: None					
Corequisites: None					

This course introduces the conceptualization process used in visual problem solving. Emphasis is placed on learning the principles of design and on the

manipulation and organization of elements. Upon completion, students should be able to apply design principles and visual elements to projects.

GRD 142	GRAPHIC DESIGN II	2	4	0	4
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Prerequisites: ART 121, DES 135, or GRD 141

Corequisites: None

This course covers the application of visual elements and design principles in advertising and graphic design. Topics include creation of various designs, such as logos, advertisements, posters, outdoor advertising, and publication design. Upon completion, students should be able to effectively apply design principles and visual elements to projects.

GRD 151	COMPUTER DESIGN BASICS	1	4	0	3
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Prerequisites: None

Corequisites: None

This course covers designing and drawing with various types of software applications for advertising and graphic design. Emphasis is placed on creative and imaginative use of space, shapes, value, texture, color, and typography to provide effective solutions to advertising and graphic design problems. Upon completion, students should be able to use the computer as a creative tool.

GRD 152	COMPUTER DESIGN TECHNIQUES I	1	4	0	3
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Prerequisites: GRD 151

Corequisites: None

This course covers complex design problems utilizing various design and drawing software applications. Topics include the expressive use of typography, image, and organization to communicate a message. Upon completion, students should be able to use appropriate computer software to professionally present their work.

GRD 160	PHOTOGRAPHY FUNDAMENTALS I	1	4	0	3
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Prerequisites: None

Corequisites: None

This course introduces basic camera operations, roll film processing, and photographic print production. Topics include contrast, depth-of-field, subject composition, enlarger operation, and density control. Upon completion, students should be able to produce photographic prints with acceptable density values and quality.

GRD 170	EXHIBIT DESIGN	1	4	0	3
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Prerequisites: GRD 141

Corequisites: None

This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply three-dimensional design concepts in both exhibit designs and commercial displays.

GRD 241	GRAPHIC DESIGN III	2	4	0	4
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Prerequisites: DES 136 or GRD 142  
Corequisites: None

This course is an advanced exploration of various techniques and media for advertising and graphic design. Emphasis is placed on advanced concepts and solutions to complex and challenging graphic design problems. Upon completion, students should be able to demonstrate competence and professionalism in visual problem solving.

GRD 242	GRAPHIC DESIGN IV	2	4	0	4
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Prerequisites: GRD 241  
Corequisites: None

This course is a continuation of GRD 241. Emphasis is placed on using advanced media techniques, concepts, strategies, and professionalism in all aspects of design. Upon completion, students should be able to conceptualize, create, and produce designs for reproduction.

GRD 265	DIGITAL PRINT PRODUCTION	1	4	0	3
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Prerequisites: GRA 152 or GRD 152  
Corequisites: None

This course covers preparation of digital files for output and reproduction. Emphasis is placed on output options, separations, color proofing, and cost and design considerations. Upon completion, students should be able to prepare files and select appropriate output methods for design solutions.

GRD 280	PORTFOLIO DESIGN	2	4	0	4
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Prerequisites: GRA 152 or GRD 142 and GRD 152  
Corequisites: None

This course covers the organization and presentation of a design/advertising or graphic art portfolio and appropriate related materials. Emphasis is placed on development and evaluation of the portfolio, design and production of a résumé and self-promotional materials, and interview techniques. Upon completion, students should be able to prepare and professionally present an effective portfolio and related self-promotional materials.

## GERONTOLOGY

GRO 120	GERONTOLOGY	3	0	0	3
Prerequisites: PSY 150 or permission of instructor					
Corequisites: None					

This course covers the psychological, social, and physical aspects of aging. Emphasis is placed on the factors that promote mental and physical well-being. Upon completion, students should be able to recognize the aging process and its psychological, social, and physical aspects.

## HEALTH

HEA 110	PERSONAL HEALTH/WELLNESS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors necessary to the maintenance of health and wellness.

HEA 111	FIRST AID AND SAFETY	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course provides first aid and safety education. Emphasis is placed on safe attitudes, accident prevention, and response to accidents and injuries. Upon completion, students should be able to demonstrate proper first aid and safety skills.

## HISTORY

HIS 111	WORLD CIVILIZATIONS I	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. *This course has been approved to*

*satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

HIS 112	WORLD CIVILIZATIONS II	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

HIS 114	COMPARATIVE WORLD HISTORY	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course provides a comparison of western and non-western cultures. Emphasis is placed on historical developments and their impact on the modern world through religion, politics, economics, and social developments. Upon completion, students should be able to compare and contrast western and non-western cultures. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

HIS 115	INTRODUCTION TO GLOBAL HISTORY	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the study of global history. Emphasis is placed on topics such as colonialism, industrialism, and nationalism. Upon completion, students should be able to analyze significant global historical issues. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

HIS 116	CURRENT WORLD PROBLEMS	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course covers current world events from an historical perspective. Topics include regional problems as well as international concerns. Upon completion, students should be able to analyze significant current world problems from an historical perspective.

HIS 117	HISTORY OF RELIGIONS	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course surveys the historical development of the world's major religions. Topics include systems of belief and religious practice, polytheism, monotheism, and current religious movements. Upon completion, students should be able to analyze the world's major religious traditions.

HIS 131	AMERICAN HISTORY I	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

HIS 132	AMERICAN HISTORY II	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

## HEALTH INFORMATION TECHNOLOGY

HIT 110	HEALTH INFORMATION ORIENTATION 2		0	0	2
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Prerequisites: Enrollment in the Health Information Technology program or permission of instructor  
Corequisites: HIT 122

This course introduces health information management and its role in health care delivery systems. Emphasis is placed on the role and responsibilities of health information professionals in a variety of settings. Upon completion, students should be able to demonstrate an understanding of health information management and health care organizations, professions, and trends.

HIT 112	HEALTH LAW AND ETHICS	3	0	0	3
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Prerequisites: HIT 110, 114 (each with a minimum grade of "C")  
Corequisites: None

	Class	Lab	Clin/ WExp	Credit Hours
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This course covers the impact of legal issues on health information management and provides an overview of the judicial system and legislative process. Topics include confidentiality, release of information, record retention, authentication, informed consent, subpoenaed information, security of computerized health information, liability, and legislative trends. Upon completion, students should be able to respond appropriately to requests for health information.

HIT 114	RECORD SYSTEMS/STANDARDS	2	3	0	3
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Prerequisites: Enrollment in the Health Information Technology program or permission of instructor

Corequisites: None

This course covers basic concepts and techniques for managing and maintaining health record systems. Topics include health record content, qualitative analysis, format, record control, storage, retention, forms design/control, indices and registers, and numbering and filing systems. Upon completion, students should be able to demonstrate an understanding of health record systems, including their maintenance and control.

HIT 122	DIRECTED PRACTICE I	0	0	3	1
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Prerequisites: Enrollment in the Health Information Technology program

Corequisites: HIT 110

This course provides supervised clinical experience in health care settings. Emphasis is placed on practical application of curriculum concepts to the health care setting. Upon completion, students should be able to apply health information theory to health care facility practices.

		Class	Lab	Clin/ WExp	Credit Hours
HIT 210	HEALTH CARE STATISTICS	3	2	0	4
Prerequisites: HIT 212, 216, 222; MAT 110; MED 122 (each with a minimum grade of "C")					
Corequisites: None					

This course covers maintenance, compilation, analysis, and presentation of health care statistics. Topics include basic statistical principles, morbidity and mortality, commonly computed hospital rates, uniform reporting requirements, and selection and construction of data displays. Upon completion, students should be able to calculate morbidity, mortality, and commonly computed hospital rates; comply with inform reporting requirements; and analyze/present statistical data.

HIT 212	CODING/CLASSIFICATION I	3	3	0	4
Prerequisites: BIO 166 or BIO 169; HIT 220, 226; MED 122 (each with a minimum grade of "C")					
Corequisites: None					

This course is the first of a two-course sequence which provides a foundation in coding and classification systems in a variety of health care settings. Emphasis is placed on ICD-9-CM coding conventions, rules, methodology and sequencing, data sets, documentation requirements, information indexing and retrieval, quality control, and coding resources. Upon completion, students should be able to apply coding principles to correctly assign ICD-9-CM.

HIT 214	CODING/CLASSIFICATION II	3	3	0	4
Prerequisites: HIT 212 (with a minimum grade of "C")					
Corequisites: None					

This course is the second of a two-course sequence which continues the study of coding and classification systems in a variety of health care settings. Topics include classification and coding systems emphasizing ICD-9-CM, HCPCS/CPT-4, reimbursement/billing systems, encoders/groupers, case mix management, and coding's relationship to managed care. Upon completion, students should be able to apply coding principles to correctly assign ICD-9-CM and HCPCS/CPT-4 codes and apply systems to optimize reimbursement.

HIT 216	QUALITY MANAGEMENT	2	2	0	3
Prerequisites: HIT 220 (with a minimum grade of "C")					
Corequisites: None					

This course introduces principles of quality improvement, utilization management, and risk management in health care. Topics include the continuous quality improvement philosophy, including tools, data analysis/application, and related committee functions; utilization management and risk management; and credentialing, accreditation and regulation. Upon completion, students should be able to apply performance improvement techniques, analyze/display data, apply level of care criteria, and participate in risk management activities.

		Class	Lab	Clin/ WExp	Credit Hours
HIT 218	MANAGEMENT	3	0	0	3
Prerequisites: HIT 222 (with a minimum grade of "C")					
Corequisites: None					

This course covers management and supervision principles as applied to health care settings. Emphasis is placed on problem-solving and communication skills related to planning, organization, directing, controlling, and budgeting. Upon completion, students should be able to apply management and supervision principles to health care settings.

HIT 220	COMPUTERS IN HEALTH CARE	1	2	0	2
Prerequisites: CIS 110 or CIS 111, HIT 112 (each with a minimum grade of "C")					
Corequisites: None					

This course covers basic computer system architecture, file structure, and design for health care settings. Topics include system analysis, design, security, and selection for a variety of hardware environments. Upon completion, students should be able to design, implement, evaluate, and maintain automated information systems in health care.

HIT 222	DIRECTED PRACTICE III	0	0	6	2
Prerequisites: HIT 122 (with a minimum grade of "C")					
Corequisites: None					

This course provides supervised clinical experience in health care settings. Emphasis is placed on practical application of curriculum concepts to the health care setting. Upon completion, students should be able to apply health information theory to health care facility practices.

HIT 224	DIRECTED PRACTICE IV	1	0	6	3
Prerequisites: HIT 222 (with a minimum grade of "C")					
Corequisites: None					

This course provides supervised clinical experience in health care settings. Emphasis is placed on practical application of curriculum concepts to the health care setting. Upon completion, students should be able to apply health information theory to health care facility practices.

HIT 226	PRINCIPLES OF DISEASE	3	0	0	3
Prerequisites: BIO 166 or BIO 169, BIO 175; MED 122 (each with a minimum grade of "C")					
Corequisites: None					

This course covers disease etiology and organ system involvement, including physical signs and symptoms, prognoses, and common complications and their management. Topics include basic microbiology, basic pharmacology, and principles of disease. Upon completion, students should be able to relate disease

processes to etiology, physical signs and symptoms, prognosis, and common complications and their management.

HIT 280	PROFESSIONAL ISSUES	2	0	0	2
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Prerequisites: HIT 212, 216 (each with a minimum grade of "C")  
Corequisites: HIT 214

This course provides a comprehensive discussion of topics common to the health information profession. Emphasis is placed on application of professional competencies, job search tools, and preparation for the certification examination. Upon completion, students should be able to demonstrate competence in entry-level domains, tasks, and subtasks for health information technologies.

## HEALTHCARE MANAGEMENT

HMT 110	INTRODUCTION TO HEALTHCARE MANAGEMENT	3	0	0	3
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Prerequisites: BUS 137  
Corequisites: None

This course introduces the functions, practices, organizational structures, and professional issues in healthcare management. Emphasis is placed on planning, controlling, directing, and communicating within health and human services organizations. Upon completion, students should be able to apply the concepts of management within a healthcare service environment.

HMT 210	MEDICAL INSURANCE	3	0	0	3
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Prerequisites: MED 121 or permission of instructor  
Corequisites: None

This course introduces the concepts of medical insurance. Topics include types and characteristics of third-party payers, coding concepts, payment systems, and manual/electronic claims form preparation. Upon completion, students should be able to process third-party claims forms.

HMT 211	LONG-TERM CARE ADMINISTRATION	3	0	0	3
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Prerequisites: HMT 110 or permission of instructor  
Corequisites: None

This course introduces the administration of long-term care facilities and services. Emphasis is placed on nursing home care, home healthcare, hospice, skilled nursing facilities, and other long-term care services. Upon completion, students should be able to administer state and national standards and regulations as they apply to long-term care.

		Class	Lab	Clin W/Exp	Credit Hours
HMT 212	MANAGEMENT OF HEALTHCARE ORGANIZATIONS	2	0	0	2
Prerequisites: HMT 110 or permission of instructor					
Corequisites: None					

This course examines current issues affecting the management of healthcare delivery systems. Topics include current problems, changes, and challenges in the healthcare environment. Upon completion, students should be able to identify current healthcare issues and their impact on healthcare management.

HMT 220	HEALTHCARE FINANCIAL MANAGEMENT	4	0	0	4
Prerequisites: HMT 110 and ACC 225 or permission of instructor					
Corequisites: None					

This course covers the methods and techniques utilized in the financial management of healthcare programs. Topics include cost determination, pricing of services, financial statement analysis, forecasting/projections, third-party billing, reimbursement, Medicare, Medicaid, and budgeting. Upon completion, students should be able to interpret and apply the principles of financial management in a healthcare environment.

## HEALTH SCIENCES

HSC 110	ORIENTATION TO HEALTH CAREERS	1	0	0	1
Prerequisites: None					
Corequisites: None					

This course is a survey of health care professions. Topics include professional duties and responsibilities, working environments, and career choices. Upon completion, students should be able to demonstrate an understanding of the health care professions and be prepared to make informed career choices.

HSC 120	CPR	0	2	0	1
Prerequisites: None					
Corequisites: None					

This course covers the basic knowledge and skills for the performance of infant, child, and adult CPR and the management of foreign body airway obstruction. Emphasis is placed on recognition, assessment, and proper management of emergency care. Upon completion, students should be able to perform infant, child, and adult CPR and manage foreign body airway obstructions.

HSC 130	LIFESTYLES TRAINER	1	4	3	1
Prerequisites: None					

Corequisites: None

This course covers the skills necessary to become a health lifestyles trainer. Emphasis is placed on the utilization of service learning as a way of changing students' health-related behaviors. Upon completion, students should be able to teach healthier lifestyles to others.

## HUMAN SERVICES

HSE 110	INRODUCTION TO HUMAN SERVICES	2	2	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the human services field, including the history, agencies, roles, and careers. Topics include personal/professional characteristics, diverse populations, community resources, disciplines in the field, systems, ethical standards, and major theoretical and treatment approaches. Upon completion, students should be able to identify the knowledge, skills, and roles of the human services worker.

HSE 112	GROUP PROCESS I	1	2	0	2
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Prerequisites: Enrollment in the HSE program or permission of instructor  
Corequisites: None

This course introduces interpersonal concepts and group dynamics. Emphasis is placed on self-awareness facilitated by experiential learning in small groups with analysis of personal experiences and the behavior of others. Upon completion, students should be able to show competence in identifying and explaining how people are influenced by their interactions in group settings.

HSE 123	INTERVIEWING TECHNIQUES	2	2	0	3
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Prerequisites: ENG 111 and permission of instructor  
Corequisites: None

This course covers the purpose, structure, focus, and techniques employed in effective interviewing. Emphasis is placed on observing, attending, listening, responding, recording, and summarizing of personal histories with instructor supervision. Upon completion, students should be able to perform the basic interviewing skills needed to function in the helping relationship.

HSE 125	COUNSELING	2	2	0	3
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Prerequisites: PSY 150  
Corequisites: None

This course covers the major approaches to psychotherapy and counseling, including theory, characteristics, and techniques. Emphasis is placed on facilitation of self-exploration, problem solving, decision making, and personal growth. Upon completion, students should be able to understand various theories of counseling and demonstrate counseling techniques. identifying seemingly dissimilar positions and facilitating agreement.

HSE 130	CHANGE AGENCY LAB I	0	3	0	1
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Prerequisites: HSE 112 or or permission of instructor  
Corequisites: None

This course provides a supervised, off-campus, three-day human relations training lab. Emphasis is placed on providing a small group experience to practice the interpersonal and group skills covered in HSE 112. Upon completion, students should be able to demonstrate group facilitation skills in a small group setting.

HSE 135	ORIENTATION LAB I	0	2	0	1
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Prerequisites: Enrollment in the HSE program  
Corequisites: None

This course is designed to promote professional, program, and personal identification with the human services field. Emphasis is placed on interpersonal communication, verbal and non-verbal interactions, and team building. Upon completion, students should be able to identify with the human services profession and demonstrate basic team-building skills.

HSE 160	HSE CLINICAL SUPERVISION I	1	0	0	1
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Prerequisites: Permission of instructor; GPA 2.00  
Corequisites: HSE 163

This course provides an opportunity to discuss clinical experiences with peers and faculty. Emphasis is placed on discussing application of concepts and principles from related course content to clinical placement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes required in human services clinical experiences.

HSE 163	HSE CLINICAL EXPERIENCE I	0	0	9	3
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Prerequisites: Successful completion of 12 SHC in the HSE program, permission of instructor, GPA 2.00  
Corequisites: HSE 160

This course provides supervised clinical experience in human services delivery agencies. Emphasis is placed on the application and practice of concepts, principles, knowledge, and skills from related course work. Upon completion, students should be able to demonstrate and apply skills, knowledge, and values from human services classes.

		Class	Lab	Clin/ WExp	Credit Hours
HSE 210	HUMAN SERVICES ISSUES	2	0	0	2
Prerequisites: Successful completion of 12 SHC in the HSE program					
Corequisites: None					

This course covers current issues and trends in the field of human services. Emphasis is placed on contemporary topics with relevance to special issues in a multi-faceted field. Upon completion, students should be able to integrate the knowledge, skills, and experiences gained in classroom and clinical experiences with emerging trends in the field.

HSE 212	GROUP PROCESS II	1	2	0	2
Prerequisites: HSE 112, permission of instructor					
Corequisites: None					

This course is a continuation of the study of interpersonal concepts and group dynamics. Emphasis is placed on self-awareness facilitated by experiential learning in small groups with analysis of personal experiences and the behavior of others. Upon completion, students should be able to demonstrate their ability to communicate with others and facilitate communications between others.

HSE 215	HEALTH CARE	3	2	3	5
Prerequisites: Enrollment in the HSE program, BIO 161					
Corequisites: None					

This course introduces basic nursing skills required to provide personal care for patients, residents, or clients in a health care setting. Topics include communications, safety, patient's rights, legal and ethical responsibilities, personal care, vital signs, elimination, nutrition, emergencies, rehabilitation, medical terminology, and mental health. Upon completion, students should be able to demonstrate the skills necessary to qualify as a Nursing Assistant I with the North Carolina Nurse Aide Registry.

HSE 225	CRISIS INTERVENTION	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the basic theories and principles of crisis intervention. Emphasis is placed on identifying and demonstrating appropriate and differential techniques for intervening in various crisis situations. Upon completion, students should be able to assess crisis situations and respond appropriately.

HSE 230	CHANGE AGENCY LAB II	0	3	0	1
Prerequisites: HSE 112, permission of instructor					
Corequisites: None					

This course provides a second supervised, off-campus, three-day human relations training lab. Emphasis is placed on providing a small group experience to practice

the interpersonal and group skills covered in HSE 112. Upon completion, students should be able to demonstrate group facilitation skills in a small group setting.

HSE 235	ORIENTATION LAB II	0	2	0	1
Prerequisites: Enrollment in the HSE program and HSE 135					
Corequisites: None					

This course is a continuation of HSE 135. Emphasis is placed on enhancing professional identify with the field of human services and strengthening team-building skills. Upon completion, students should be able to continue personal awareness of values, lifestyles, career plans, and decisions that have an impact on human services professionals.

HSE 251	ACTIVITIES THERAPY	2	2	0	3
Prerequisites: None					
Corequisites: None					

This course introduces skills and techniques used in recreation and leisure activities to enhance the lives of special populations. Emphasis is placed on music, art, and recreational therapy. Upon completion, students should be able to define, plan, and adapt recreational activities for selected groups and individuals.

HSE 260	HSE CLINICAL SUPERVISION II	1	0	0	1
Prerequisites: Successful completion of 12 SHC in the HSE program, permission of instructor, GPA 2.00					
Corequisites: HSE 264					

This course provides an opportunity to discuss clinical experiences with peers and faculty. Emphasis is placed on discussing application of concepts and principles from related course content to clinical placement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes required in human services clinical experiences.

HSE 264	HSE CLINICAL EXPERIENCE II	0	0	12	4
Prerequisites: Successful completion of 12 SHC in the HSE program, permission of instructor, GPA 2.00					
Corequisites: HSE 260					

This course provides additional supervised clinical experience in human services delivery agencies. Emphasis is placed on the application and practice of concepts, principles, knowledge, and skills from related course work. Upon completion, students should be able to demonstrate and apply skills, knowledge, and values from human services classes.

HSE 270	HSE CLINICAL SUPERVISION III	1	0	0	1
Prerequisites: Successful completion of 12 SHC in the HSE program, permission of instructor, GPA 2.00					

Corequisites: HSE 272

This course provides an opportunity to discuss clinical experiences with peers and faculty. Emphasis is placed on discussing application of concepts and principles from related course content to clinical placement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes required in human services clinical experiences.

HSE 272	HSE CLINICAL EXPERIENCE III	0	0	6	2
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Prerequisites: Successful completion of 12 SHC in the HSE program, permission of instructor, GPA 2.00

Corequisites: HSE 270

This course provides additional supervised clinical experience in human services delivery agencies. Emphasis is placed on the application and practice of concepts, principles, knowledge, and skills from related course work. Upon completion, students should be able to demonstrate and apply skills, knowledge, and values from human services classes.

## HEALTH UNIT COORDINATOR

HUC 101	HUC THEORY AND PRACTICE	8	8	0	12
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Prerequisites: None

Corequisites: None

This course introduces a variety of clerical duties within a hospital setting. Emphasis is placed on clerical, computer, and receptionist duties for the nursing units; maintenance of consistent patient medical records; and inter/intradepartmental communication. Upon completion, students should be able to perform patient and unit support services in a patient care environment.

## HUMANITIES

HUM 115	CRITICAL THINKING	3	0	0	3
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Prerequisites: ENG 101, ENG 102, or ENG 111

Corequisites: None

This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts.

		Class	Lab	Clin/ WExp	Credit Hours
HUM 160	INTRODUCTION TO FILM	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the fundamental elements of film artistry and production. Topics include film styles, history, and production techniques, as well as the social values reflected in film art. Upon completion, students should be able to critically analyze the elements covered in relation to selected films. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

HUM 211	HUMANITIES I	3	0	0	3
Prerequisites: ENG 111					
Corequisites: None					

This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of cultures from ancient through early modern times. Upon completion, students should be able to identify significant figures and cultural contributions of the periods studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

HUM 212	HUMANITIES II	3	0	0	3
Prerequisites: ENG 111					
Corequisites: None					

This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of cultures from early modern times to the present. Upon completion, students should be able to identify significant figures and cultural contributions of the periods studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

HUM 230	LEADERSHIP DEVELOPMENT	3	0	3	
Prerequisites: ENG 111					
Corequisites: None					

This course explores the theories and techniques of leadership and group process. Emphasis is placed on leadership styles, theories of group dynamics, and the moral and ethical responsibilities of leadership. Upon completion, students should be able to identify and analyze a personal philosophy and style of leadership and integrate these concepts in various practical situations.

		Class	Lab	Clin/ WExp	Credit Hours
<b>HYDRAULICS</b>					
HYD 110	HYDRAULICS/PNEUMATICS I	2	3	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting.

## INSURANCE

INS 101	LIFE/ACCIDENT/HEALTH INSURANCE 4		0	0	4
Prerequisites: None					
Corequisites: None					

This course provides basic instruction in life and health insurance. Topics include life, accident, and health agent regulations, comparison of policies, and individual and group policy provisions. Upon completion, students should be able to demonstrate knowledge of life, health, and accident insurance required for the NC Agents' Life and Health Licensure Exam.

INS 102	MEDICARE SUPPLEMENTS/ LONG-TERM CARE	1	0	0	1
Prerequisites: None					
Corequisites: None					

This course covers the types of Medicare coverage, long-term care coverage, Medicaid, policy provisions, applicable laws and regulations, and buying practices. Topics include hospital insurance, supplementary medical insurance, Medicare supplement insurance, Medicaid assistance, and long-term care. Upon completion, students should be able to discuss long-term care coverage, Medicaid, appropriate policy provisions, legal principles, and their applicable use.

INS 103	PROPERTY AND CASUALTY INSURANCE	4	0	0	4
Prerequisites: None					
Corequisites: None					

This course covers types of property and casualty coverage, policy provisions, applicable laws and regulations, buying procedures, government property, and casualty coverage. Topics include general liability insurance, automobile insurance

		Class	Lab	Clin/ WExp	Credit Hours
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homeowner's insurance, commercial, fire and extended coverage, worker's compensation, and various policy provisions. Upon completion, students should be able to discuss types of property and casualty coverage, appropriate policy provisions, and appropriate legal principles and their applicable uses.

INS 105	RISK MANAGEMENT	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the fundamentals of risk management. Topics include risk and hazard recognition and measurement, risk handling methods, steps of the risk management process, and design of a risk management plan. Upon completion, students should be able to recognize risks and hazards and develop a plan for managing them by retention, avoidance, reduction, and transfer methods.

INS 107	CLAIMS ADJUSTING	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the legal basis of contracts and claims. Emphasis is placed on the elements and purpose of negligence, principles of torts, investigation and interview techniques, medical terminology, and diagnostic procedures. Upon completion, students should be able to demonstrate the ability to investigate and legally settle claims.

INS 108	INCOME TAXATION OF INSURANCE	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the federal income tax system with particular reference to the taxation of life insurance and annuities. Topics include tax concepts, gross income, business expenses, deductions, credits, sales and exchanges, capital gains and losses, and taxation of business entities. Upon completion, students should be able to demonstrate professional financial service planning strategies to minimize, defer, or avoid taxation for clients.

INS 109	EMPLOYEE BENEFITS	2	0	0	2
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Prerequisites: None  
Corequisites: None

This course introduces the concepts of employee benefit options in the business insurance market. Emphasis is placed on governmental and private programs, group insurance benefits, pension plans, and other deferred compensation arrangements. Upon completion, students should be able to explain the fundamental features of employer sponsored benefit plans.

## INDUSTRIAL SCIENCE

ISC 112	INDUSTRIAL SAFETY	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA and environmental regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment.

ISC 115	CONSTRUCTION SAFETY	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course introduces the basic concepts of construction site safety. Topics include ladders, lifting, lock-out/tag-out, personal protective devices, scaffolds, and above/below ground work based on OSHA regulations. Upon completion, students should be able to demonstrate knowledge of applicable safety regulations and safely participate in construction projects.

ISC 132	MANUFACTURING QUALITY CONTROL 2	2	3	0	3
Prerequisites: None					
Corequisites: None					

This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment.

ISC 133	MANUFACTURING MANAGEMENT PRACTICES	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course covers successful industrial organizations and management practices for improving quality and productivity. Topics include self-managed work teams, problem-solving skills, and production management techniques. Upon completion, students should be able to demonstrate an understanding of day-to-day plant operations, team management processes, and the principles of group dynamics.

ISC 135	PRINCIPLES OF INDUSTRIAL MANAGEMENT	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers the managerial principles and practices required for organizations to succeed in modern industry. Topics include the functions and roles of all levels of management, organization design, and planning and control of manufacturing operations. Upon completion, students should be able to demonstrate an understanding of management principles and integrate these principles into job situations.

ISC 136	PRODUCTIVITY ANALYSIS I	2	3	0	3
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Prerequisites: None  
Corequisites: None

This course covers modern methods of improving productivity. Topics include traditional motion economy, methods analysis, time standards, process analysis, cycle time management, and human factors/ergonomics. Upon completion, students should be able to demonstrate an understanding of productivity concepts and apply productivity improvement techniques to work situations.

ISC 140	MATERIAL AND CAPACITY PLANNING	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course covers materials requirements planning (MRP) and capacity requirements planning (CRP). Emphasis is placed on measuring the amount of work scheduled and determining the human, physical, and material resources necessary. Upon completion, students should be able to demonstrate an understanding of material and capacity requirements planning and be prepared for the APICS CPIM examination.

ISC 141	PRODUCTION ACTIVITY CONTROL	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course covers a broad base of production operations in a wide variety of production environments. Emphasis is placed on the principles, approaches, and techniques needed to schedule, control, measure, and evaluate the effectiveness of production operations. Upon completion, students should be able to demonstrate an understanding of production activity control and be prepared for the APICS CPIM examination.

ISC 142	INVENTORY MANAGEMENT	3	0	0	3
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Prerequisites: None  
Corequisites: ISC 140

This course covers the principles, concepts, and techniques of managing inventory. Emphasis is placed on determining what to order, quantities to order, when items are needed, when to order, and how and where to store. Upon completion, students

should be able to demonstrate an understanding of the process of inventory management and be prepared for the APICS CPIM examination.

ISC 216	WORK MEASUREMENT	3	0	0	3
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Prerequisites: None

Corequisites: None

This course introduces the techniques of work simplification, job method improvement, and sampling using the various charts and methods of evaluations to determine utilization. Emphasis is placed on the development of effective work methods and the charting of methods to improve output. Upon completion, students should be able to demonstrate the use of various charts and studies to indicate levels or changes in levels of performance.

ISC 221	STATISTICAL QUALITY CONTROL	3	0	0	3
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Prerequisites: Completion of curriculum mathematics requirement

Corequisites: None

This course covers the principles and techniques of statistical process control for the improvement of productivity. Emphasis is placed on basic statistics for quality control, organization and procedures for efficient quality control including inspections, process control, and tests of significance. Upon completion, students should be able to apply statistical principles and techniques to enhance production.

ISC 233	INDUSTRIAL ORGANIZATION AND MANAGEMENT	3	0	0	3
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Prerequisites: ISC 128 or ISC 133

Corequisites: None

This course covers advanced organization and management philosophies for organization improvement. Emphasis is placed on understanding comprehensive organization improvement concepts such as reengineering, MBQA, ISO 9000, and teams. Upon completion, students should be able to demonstrate an understanding of organizations and assess their strengths and weaknesses.

## LEGAL EDUCATION

LEX 110	INTRODUCTION TO PARALEGAL STUDY	2	0	0	2
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Prerequisites: None

Corequisites: None

This course introduces the paralegal profession and the legal system. Topics include regulations and concepts, ethics, case analysis, legal reasoning, career opportunities, certification, professional organizations, and other related topics.

Upon completion, students should be able to explain the role of the paralegal and identify the skills, knowledge, and ethics required of legal assistants.

LEX 120	LEGAL RESEARCH/WRITING I	2	2	0	3
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Prerequisites: None

Corequisites: None

This course introduces the techniques of legal research and writing. Emphasis is placed on locating, analyzing, applying, and updating sources of law; effective legal writing, including proper citation; and the use of electronic research methods.

Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course.

LEX 121	LEGAL RESEARCH/WRITING II	2	2	0	3
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Prerequisites: LEX 120

Corequisites: None

This course covers advanced topics in legal research and writing. Topics include more complex legal issues and assignments involving preparation of legal memos, briefs, and other documents and the advanced use of electronic research methods.

Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course.

LEX 130	CIVIL INJURIES	2	0	0	2
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Prerequisites: None

Corequisites: None

This course covers traditional tort concepts and the evolving body of individual rights created by statute. Topics include intentional and non-intentional torts with emphasis on negligence, strict liability, civil rights, workplace and environmental liability, remedies, and damages. Upon completion, students should be able to recognize, explain, and evaluate elements of civil injuries and related defenses.

LEX 140	CIVIL LITIGATION I	3	0	0	3
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Prerequisites: None

Corequisites: None

This course introduces the structure of the legal system and the rules governing civil litigation. Emphasis is placed on jurisdiction and the state and federal rules of civil procedure and rules of evidence. Upon completion, students should be able to assist an attorney in the preparation of a civil case.

LEX 141	CIVIL LITIGATION II	2	2	0	3
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Prerequisites: LEX 140

Corequisites: None

This course covers the paralegal's role in the civil litigation process. Topics include investigation, interviewing, pleadings, motions, discovery, and trial and appellate procedures. Upon completion, students should be able to assist an attorney in preparing, directing, and organizing documents for civil litigation.

LEX 150	COMMERCIAL LAW	2	2	0	3
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Prerequisites: None  
Corequisites: None

This course covers legally enforceable agreements, forms of organization, and selected portions of the Uniform Commercial Code. Topics include drafting and enforcement of contracts, leases, and related documents and selection and implementation of business organization forms, sales, and commercial papers. Upon completion, students should be able to apply the elements of a contract, prepare various business documents, and understand the role of commercial paper.

LEX 160	CRIMINAL LAW AND PROCEDURE	2	2	0	3
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Prerequisites: None  
Corequisites: None

This course introduces substantive criminal law and procedural rights of the accused. Topics include elements of state/federal crimes, defenses, constitutional issues, pre-trial and trial process, and other related topics. Upon completion, students should be able to explain elements of specific crimes and assist an attorney in preparing a criminal case.

LEX 170	ADMINISTRATIVE LAW	2	0	0	2
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Prerequisites: None  
Corequisites: None

This course covers the scope, authority, and regulatory operations of various federal, state, and local administrative agencies. Topics include social security, worker's compensation, unemployment, zoning, and other related topics. Upon completion, students should be able to research sources of administrative law, investigate, and assist in representation of clients before administrative agencies.

LEX 210	REAL PROPERTY I	2	0	0	2
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Prerequisites: None  
Corequisites: None

This course introduces the study of real property law. Topics include the distinction between real and personal property, various estates, mechanics of conveyance and encumbrance, recordation, special proceedings, and other related topics. Upon completion, students should be able to identify estates, forms of deeds, requirements for recording, and procedures to enforce rights to real property.

LEX 211	REAL PROPERTY II	1	4	0	3
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Prerequisites: LEX 210  
Corequisites: None

This course continues the study of real property law relating to title examination and preparation of closing documents. Topics include use of courthouse and other public records in title examination and preparation of documents required in real estate transactions and closings. Upon completion, students should be able to plot/draft a description, perform complete title examination, draft closing documents including title insurance forms, and prepare disbursement reconciliation.

LEX 240	FAMILY LAW	2	0	0	2
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Prerequisites: None  
Corequisites: None

This course covers laws governing domestic relations. Topics include marriage, separation, divorce, child custody, support, property division, adoption, domestic violence, and other related topics. Upon completion, students should be able to interview clients, gather information, and draft documents related to family law.

LEX 250	WILLS, ESTATES, AND TRUSTS	2	2	0	3
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Prerequisites: None  
Corequisites: None

This course covers various types of wills, trusts, probate, estate administration, and intestacy. Topics include types of wills and execution requirements, caveats and dissents, intestate succession, inventories and accountings, distribution and settlement, and other related topics. Upon completion, students should be able to draft simple wills, prepare estate forms, understand administration of estates including taxation, and explain terms regarding trusts.

LEX 260	BANKRUPTCY AND COLLECTIONS	2	0	0	2
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Prerequisites: None  
Corequisites: None

This course provides an overview of the laws of bankruptcy and the rights of creditors and debtors. Topics include bankruptcy procedures and estate management, attachment, claim and delivery, repossession, foreclosure, collection, garnishment, and post-judgment collection procedure. Upon completion, students should be able to prepare and file bankruptcy forms, collection letters, statutory liens, and collection of judgments.

LEX 270	LAW OFFICE MANAGEMENT/ TECHNOLOGY	1	2	0	2
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Prerequisites: None  
Corequisites: None

This course provides an overview of law office management and organization. Topics include office forms, filing systems, billing/time keeping, computer systems, calendar systems, library administration, case management, office/personnel procedures, ethics, and technology. Upon completion, students should be able to set up and maintain various law office systems, monitor case progress, and supervise non-lawyer personnel.

LEX 280	ETHICS AND PROFESSIONALISM	2	0	0	2
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Prerequisites: None  
Corequisites: None

This course reinforces legal ethics and the role of the paralegal in a professional work environment. Topics include a review of ethics, employment opportunities, and search techniques; paralegal certification; and other related topics. Upon completion, students should be able to understand the role of a professional paralegal and identify authority that can properly be delegated by an attorney.

## MACHINING

MAC 111	MACHINING TECHNOLOGY I	2	12	0	6
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Prerequisites: None  
Corequisites: None

This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

MAC 112	MACHINING TECHNOLOGY II	2	12	0	6
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Prerequisites: MAC 111  
Corequisites: None

This course provides additional instruction and practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling.

MAC 113	MACHINING TECHNOLOGY III	2	12	0	6
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Prerequisites: MAC 112  
Corequisites: None

This course provides an introduction to advanced and special machining operations. Emphasis is placed on working to specified tolerances with special and advanced setups. Upon completion, students should be able to produce a part to specifications.

MAC 114	INTRODUCTION TO METROLOGY	2	0	0	2
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Prerequisites: None

Corequisites: None

This course introduces the care and use of precision measuring instruments. Emphasis is placed on the inspection of machine parts and use of a wide variety of measuring instruments. Upon completion, students should be able to demonstrate the correct use of measuring instruments.

MAC 122	CNC TURNING	1	3	0	2
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Prerequisites: None

Corequisites: None

This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers.

MAC 124	CNC MILLING	1	3	0	2
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Prerequisites: None

Corequisites: None

This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers.

MAC 151	MACHINING CALCULATIONS	1	2	0	2
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Prerequisites: None

Corequisites: None

This course introduces basic calculations as they relate to machining occupations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations.

MAC 214	MACHINING TECHNOLOGY IV	2	12	0	6
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Prerequisites: MAC 112

Corequisites: None

This course provides advanced applications and practical experience in the manufacturing of complex parts. Emphasis is placed on inspection, gaging, and the

		Class	Lab	Clin/ WExp	Credit Hours
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utilization of machine tools. Upon completion, students should be able to manufacture complex assemblies to specifications.

MAC 215	MACHINING TECHNOLOGY V	2	12	0	6
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Prerequisites: MAC 214  
Corequisites: None

This course provides an opportunity to apply skills acquired in previous course work. Emphasis is placed on the production of parts using modern machining and gaging techniques. Upon completion, students should be able to demonstrate problem-solving skills as they relate to advanced machining.

MAC 222	ADVANCED CNC TURNING	1	3	0	2
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Prerequisites: MAC 122  
Corequisites: None

This course covers advanced methods in setup and operation of CNC turning centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC turning centers.

MAC 224	ADVANCED CNC MILLING	1	3	0	2
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Prerequisites: MAC 124  
Corequisites: None

This course covers advanced methods in setup and operation of CNC machining centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC machining centers.

## MASONRY

MAS 110	MASONRY I	4	18	0	10
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Prerequisites: None  
Corequisites: None

This course introduces the basic principles of construction with masonry units. Topics include history of the masonry field, safety practices, blueprint reading, and principles of laying masonry units to the line using tools, equipment, and materials. Upon completion, students should be able to demonstrate knowledge of safety practices, blueprint reading, and basic tool use; identify materials; operate machinery; and lay masonry units.

MAS 120	MASONRY II	4	18	0	10
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Prerequisites: None

Corequisites: None

This course provides practical experience in cost estimating, foundations, bonding variations, expansion joints, wall ties, building codes, and other related topics. Emphasis is placed on material estimation, layout of footing, construction of walls, reinforcements, scaffolding, insulating, and building codes. Upon completion, students should be able to determine cost, plan sound building procedures, construct masonry projects, and apply building codes.

MAS 130	MASONRY III	6	6	0	8
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Prerequisites: None

Corequisites: None

This course provides fundamentals and skills used in masonry construction. Emphasis is placed on building chimneys, fireplaces, columns, concrete masonry, and arches; using materials economically; satisfying needs and expectations; and proper work ethics. Upon completion, students should be able to build structures covered in the course, demonstrate increased speed and accuracy, and make smooth transitions between construction stages.

## MATHEMATICS

MAT 050	BASIC MATH SKILLS	3	2	0	4
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Prerequisites: None

Corequisites: None

This course is designed to strengthen basic math skills. Topics include properties, rounding, estimating, comparing, converting, and computing whole numbers, fractions, and decimals. Upon completion, students should be able to perform basic computations and solve relevant mathematical problems.

MAT 060	ESSENTIAL MATHEMATICS	3	2	0	4
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Prerequisites: None

Corequisites: None

This course is a comprehensive study of mathematical skills which should provide a strong mathematical foundation to pursue further study. Topics include principles and applications of decimals, fractions, percents, ratio and proportion, order of operations, geometry, measurement, and elements of algebra and statistics. Upon completion, students should be able to perform basic computations and solve relevant, multi-step mathematical problems using technology where appropriate.

MAT 070	INTRODUCTORY ALGEBRA	3	2	0	4
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Prerequisites: MAT 060 or appropriate placement test score

Corequisites: ENG 085

This course establishes a foundation in algebraic concepts and problem solving. Topics include signed numbers, exponents, order of operations, simplifying expressions, solving linear equations and inequalities, graphing, formulas, polynomials, factoring, and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology.

MAT 080	INTERMEDIATE ALGEBRA	3	2	0	4
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Prerequisites: MAT 070 or appropriate placement test score  
Corequisites: ENG 085

This course continues the study of algebraic concepts with emphasis on applications. Topics include factoring; rational expressions; rational exponents; rational, radical, and quadratic equations; systems of equations; inequalities; graphing; functions; variations; complex numbers; and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology.

MAT 101	APPLIED MATHEMATICS I	2	2	0	3
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Prerequisites: MAT 060 or appropriate placement test score  
Corequisites: None

This course is a comprehensive review of arithmetic with basic algebra designed to meet the needs of certificate and diploma programs. Topics include arithmetic and geometric skills used in measurement, ratio and proportion, exponents and roots, applications of percent, linear equations, formulas, and statistics. Upon completion, students should be able to solve practical problems in their specific areas of study.

MAT 110	MATHEMATICAL MEASUREMENT	2	2	0	3
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Prerequisites: MAT 070 or appropriate placement test score  
Corequisites: None

This course provides an activity-based approach to utilizing, interpreting, and communicating data in a variety of measurement systems. Topics include accuracy, precision, conversion, and estimation within metric, apothecary, and avoirdupois systems; ratio and proportion; measures of central tendency and dispersion; and charting of data. Upon completion, students should be able to apply proper techniques to gathering, recording, manipulating, analyzing, and communicating data.

MAT 115	MATHEMATICAL MODELS	2	2	0	3
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Prerequisites: MAT 070 or appropriate placement test score  
Corequisites: None

This course develops the ability to utilize mathematical skills and technology to solve problems at a level found in non-mathematics-intensive programs. Topics

	Class	Lab	Clin/ WExp	Credit Hours
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include applications to percent, ratio and proportion, formulas, statistics, functional notation, linear functions and their groups, probability, sampling techniques, scatter plots, and modeling. Upon completion, students should be able to solve practical problems, reason and communicate with mathematics, and work confidently, collaboratively, and independently.

MAT 120      GEOMETRY AND TRIGONOMETRY	2	2	0	3
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Prerequisites: MAT 070 or appropriate placement test score  
Corequisites: None

This course introduces the concepts of plane trigonometry and geometry with emphasis on applications to problem solving. Topics include the basic definitions and properties of plane and solid geometry, area and volume, right triangle trigonometry, and oblique triangles. Upon completion, students should be able to solve applied problems both independently and collaboratively using technology.

MAT 121      ALGEBRA/TRIGONOMETRY I	2	2	0	3
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Prerequisites: MAT 070 or appropriate placement test score  
Corequisites: None

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include simplification, evaluation, and solving of algebraic, radical, exponential, and logarithmic functions; descriptive statistics; right triangle trigonometry; and the use of technology. Upon completion, students should be able to demonstrate an understanding of the use of mathematics and technology to solve problems and analyze and communicate results.

MAT 122      ALGEBRA/TRIGONOMETRY II	2	2	0	3
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Prerequisites: MAT 121  
Corequisites: None

This course extends the concepts covered in MAT 121 to include additional topics in algebra, function analysis, trigonometry, and systems of equations. Topics include translation and scaling of functions, Sine Law, Cosine Law, complex numbers, vectors, statistics, and systems of equations. Upon completion, students should be able to demonstrate an understanding of the use of technology to solve problems and to analyze and communicate results.

MAT 155      STATISTICAL ANALYSIS	3	0	0	3
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Prerequisites: MAT 080 or MAT 090  
Corequisites: None

This course is an introduction to descriptive and inferential statistics. Topics include sampling, distributions, plotting data, central tendency, dispersion, Central Limits Theorem, confidence intervals, hypothesis testing, correlations, regressions, and multinomial experiments. Upon completion, students should be able to

describe data and test inferences about populations using sample data. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

MAT 155A	STATISTICAL ANALYSIS LAB	0	2	0	1
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Prerequisites: MAT 080 or MAT 090  
Corequisites: MAT 155

This course is a laboratory for MAT 155. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively.

MAT 161	COLLEGE ALGEBRA	3	0	0	3
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Prerequisites: MAT 080 or appropriate placement test score  
Corequisites: MAT 161A

This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on equations and inequalities; polynomial, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

MAT 161A	COLLEGE ALGEBRA LAB	0	2	0	1
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Prerequisites: MAT 080 or appropriate placement test score  
Corequisites: MAT 161

This course is a laboratory for MAT 161. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively.

MAT 162	COLLEGE TRIGONOMETRY	3	0	0	3
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Prerequisites: MAT 161  
Corequisites: MAT 162A

This course provides an integrated technological approach to trigonometry and its applications. Topics include trigonometric ratios, right triangles, oblique triangles, trigonometric functions, graphing, vectors, and complex numbers. Upon completion, students should be able to apply the above principles of trigonometry to problem solving and communication. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

		Class	Lab	Clin/ WExp	Credit Hours
MAT 162A	COLLEGE TRIGONOMETRY LAB	0	2	0	1
Prerequisites: MAT 161					
Corequisites: MAT 162					

This course is a laboratory for MAT 162. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively.

MAT 223	APPLIED CALCULUS	2	2	0	3
Prerequisites: MAT 122					
Corequisites: MAT 223A					

This course provides an introduction to the calculus concepts of differentiation and integration by way of application and is designed for engineering technology students. Topics include limits, slope, derivatives, related rates, areas, integrals, and applications. Upon completion, students should be able to demonstrate an understanding of the use of calculus and technology to solve problems and to analyze and communicate results.

MAT 263	BRIEF CALCULUS	3	0	0	3
Prerequisites: MAT 161					
Corequisites: None					

This course introduces concepts of differentiation and integration and their applications to solving problems; the course is designed for students needing one semester of calculus. Topics include functions, graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

## MECHANICAL

MEC 110	INTRODUCTION TO CAD/CAM	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course introduces computer-aided drafting(CAD) and computer-aided manufacturing(CAM). Emphasis is placed on transferring part geometry from CAD to CAM for the development of a CNC-ready program. Upon completion, students should be able to use CAD/CAM software to produce a CNC program.

		Class	Lab	Clin/ WExp	Credit Hours
MEC 111	MACHINE PROCESSES I	2	3	0	3
Prerequisites: None					
Corequisites: None					

This course introduces safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include safety, measuring tools, and the basic setup and operation of lathes, milling machines, drill presses, and saws. Upon completion, students should be able to manufacture a simple part to a specified tolerance.

MEC 112	MACHINE PROCESSES II	2	3	0	3
Prerequisites: MEC 111					
Corequisites: None					

This course covers advanced use of milling machines and lathes. Emphasis is placed on safety and compound setup of milling machines and lathes for manufacture of projects with a specified fit. Upon completion, students should be able to demonstrate proper procedures for manufacture of assembled parts

MEC 130	MECHANISMS	2	3	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the purpose and action of various mechanical devices. Topics include cams, cables, gear trains, differentials, screws, belts, pulleys, shafts, levers, lubricants, and other devices used to transmit or control signals. Upon completion, students should be able to analyze, maintain, and troubleshoot the components of mechanical systems.

MEC 142	PHYSICAL METALLURGY	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course covers the heat treating of metals. Emphasis is placed on the effects of hardening, tempering, and annealing on the structure and physical properties of metals. Upon completion, students should be able to heat treat materials.

MEC 161	MANUFACTURING PROCESSES I	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course provides the fundamental principles of processing materials into usable forms for the customer. Emphasis is placed on material forming, removal, and value-added processing provided to the customer by the manufacturers. Upon completion, students should be able to apply principles of traditional and non-traditional processing for metals and non-metals.

		Class	Lab	Clin/ WExp	Credit Hours
MEC 161A	MANUFACTURING PROCESSES I LAB	0	3	0	1
Prerequisites: None					
Corequisites: MEC 161					

This course is a laboratory for MEC 161. Emphasis is placed on experiences that enhance the materials presented in MEC 161. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in MEC 161.

MEC 165	FABRICATION TECHNIQUES	1	3	0	2
Prerequisites: WLD 112 and MEC 111					
Corequisites: None					

This course expands skills in bench work, welding, and machinery. Emphasis is placed on integrating techniques of welding and machine processes. Upon completion, students should be able to design, fabricate, and repair parts and/or modify existing equipment.

MEC 175	EQUIPMENT INSTALLATION	0	6	0	2
Prerequisites: None					
Corequisites: None					

This course covers practical applications in the layout, preparation, and placement of industrial equipment including mechanical and electrical activity required to start up the equipment. Emphasis is placed on procedures for safely installing industrial equipment including start-up and debugging operations, coordination of mechanical/electrical/instrumentation, and other discipline activities. Upon completion, students should be able to effectively perform and/or coordinate all of the activities required for the installation of industrial equipment.

MEC 180	ENGINEERING MATERIALS	2	3	0	3
Prerequisites: None					
Corequisites: None					

This course covers the physical and mechanical properties of materials. Topics include testing, heat treating, ferrous and non-ferrous metals, plastics, composites, and material selection. Upon completion, students should be able to specify basic tests and properties and select appropriate materials on the basis of specific properties.

MEC 236	LOCAL/REGIONAL MANUFACTURING	1	4	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the local and regional manufacturing facilities. Emphasis is placed on on-site tours and interaction with manufacturing personnel. Upon completion, students should be able to identify local and regional manufacturers, their products, basic methods, personnel, and hiring standards.

		Class	Lab	Clin/ WExp	Credit Hours
MEC 240	MECHANICAL INSTALLATION I	1	6	0	3
Prerequisites: MEC 111					
Corequisites: None					

This course covers the assembling, setting, leveling, and aligning of non-precision equipment, including belt and chain drives, conveyors, shafts, presses, and hoists. Topics include site preparation, grouting, vibration control, safety guarding, lubrication, drawing interpretation, and use of basic millwright tools. Upon completion, students should be able to properly install mechanical systems consisting of basic drive train components.

MEC 241	MECHANICAL INSTALLATION II	1	6	0	3
Prerequisites: MEC 240					
Corequisites: None					

This course covers the assembling, setting, leveling, and aligning of precision machinery, including pumps, mixers, blenders, fillers, compressors, couplings, and other related equipment. Emphasis is placed on optical and electronic leveling systems, complex drive systems, dial indicators for precision alignment, and other installation and alignment devices. Upon completion, students should be able to properly install and align complex manufacturing components and equipment. *This course is a unique concentration requirement in the Mechanical concentration in the Industrial Construction Technology program.*

MEC 250	STATICS AND STRENGTH OF MATERIALS	4	3	0	5
Prerequisites: PHY 131 or PHY 151					
Corequisites: None					

This course covers the concepts and principles of statics and stress analysis. Topics include systems of forces on structures in equilibrium and analysis of stresses and strains on these components. Upon completion, students should be able to analyze forces and the results of stresses and strains on structural components.

## **MEDICAL ASSISTING**

MED 110	ORIENTATION TO MEDICAL ASSISTING1	0	0	1
Prerequisites: None				
Corequisites: None				

This course covers the history of medicine and the role of the medical assistant in the health care setting. Emphasis is placed on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting.

		Class	Lab	Clin/ WExp	Credit Hours
MED 112	ORIENTATION TO THE CLINIC SETTING I	0	0	3	1
Prerequisites: Enrollment in the Medical Assisting program					
Corequisites: None					

This course provides an early opportunity to observe the medical setting. Emphasis is placed on medical assisting procedures including appointment scheduling, filing, greeting patients, telephone techniques, billing, collections, medical records, and related medical procedures. Upon completion, students should be able to identify administrative and clinical procedures in the medical environment.

MED 113	ORIENTATION TO THE CLINIC SETTING II	0	0	6	2
Prerequisites: Enrollment in the Medical Assisting program					
Corequisites: None					

This course provides an opportunity to observe and/or perform in the medical setting. Emphasis is placed on administrative and clinical medical assisting. Upon completion, students should be able to identify administrative and clinical procedures in the health care environment.

MED 114	PROFESSIONAL INTERACTION IN HEALTH CARE	1	0	0	1
Prerequisites: Enrollment in the Medical Assisting program					
Corequisites: None					

This course is designed to identify various patient behaviors encountered in the medical setting. Emphasis is placed on stressors related to illness, cultural influences, death and dying, and needs specific to patients. Upon completion, students should be able to utilize appropriate methods of verbal and nonverbal communication with empathy and impartiality.

MED 118	MEDICAL LAW AND ETHICS	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course covers legal relationships of physicians and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and bioethical issues. Emphasis is placed on legal terms, professional attitudes, and the principles and basic concepts of ethics and laws involved in providing medical services. Upon completion, students should be able to meet the legal and ethical responsibilities of a multi-skilled health professional.

MED 121	MEDICAL TERMINOLOGY I	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED 122	MEDICAL TERMINOLOGY II	3	0	0	3
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Prerequisites: MED 121  
Corequisites: None

This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED 130	ADMINISTRATIVE OFFICE PROCEDURES I	1	2	0	2
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Prerequisites: Enrollment in the Medical Assisting program  
Corequisites: None

This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment.

MED 131	ADMINISTRATIVE OFFICE PROCEDURES II	1	2	0	2
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Prerequisites: MED 130  
Corequisites: None

This course is the second in a series and provides medical office procedures in both economic and management skills. Topics include physical plant maintenance, equipment and supplies, liability coverage, medical economics, and introductory insurance procedures. Upon completion, students should be able to manage the economics of the medical office and supervise personnel.

MED 134	MEDICAL TRANSCRIPTION	2	2	0	3
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Prerequisites: MED 121  
Corequisites: None

This course provides the basic knowledge, understanding, and skills required to complete medical reports and transcribe medical dictation. Emphasis is placed on correct punctuation, capitalization, and spelling. Upon completion, students should be able to demonstrate competence in medical transcription.

MED 140	EXAMINING ROOM PROCEDURES I	3	4	0	5
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		Class	Lab	Clin/ WExp	Credit Hours
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Prerequisites: Enrollment in the Medical Assisting program

Corequisites: None

This course provides instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG, vital signs, and medical emergencies. Upon completion, students should be able to demonstrate competence in exam room procedures.

MED 150	LABORATORY PROCEDURES I	3	4	0	5
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Prerequisites: Enrollment in the Medical Assisting program

Corequisites: None

This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics.

MED 180	CPR CERTIFICATION	0	2	0	1
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Prerequisites: None

Corequisites: None

This course provides the basic knowledge and skills necessary to perform infant, child, and adult CPR and to manage foreign body airway obstruction. Emphasis is placed on triage, assessment, and proper management of emergency care. Upon completion, students should be able to perform the infant, child, and adult CPR.

MED 232	MEDICAL INSURANCE CODING	1	3	0	2
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Prerequisites: MED 131

Corequisites: None

This course is designed to build upon the coding skills introduced in MED 131. Emphasis is placed on advanced diagnostic and procedural coding in the outpatient facility. Upon completion, students should be able to demonstrate proficiency in coding for reimbursement.

MED 240	EXAMINING ROOM PROCEDURES II	3	4	0	5
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Prerequisites: MED 140

Corequisites: None

This course is designed to expand and build upon skills presented in MED 140. Emphasis is placed on advanced exam room procedures. Upon completion, students should be able to demonstrate enhanced competence in selected exam room procedures.

MED 260	MEDICAL CLINICAL EXTERNSHIP	0	0	15	5
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Prerequisites: Enrollment in the Medical Assisting program  
Corequisites: None

This course provides the opportunity to apply clinical, laboratory, and administrative skills in a medical facility. Emphasis is placed on enhancing competence in clinical and administrative skills necessary for comprehensive patient care and strengthening professional communications and interactions. Upon completion, students should be able to function as an entry-level health care professional.

MED 262	CLINICAL PERSPECTIVES	1	0	0	1
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Prerequisites: Enrollment in the Medical Assisting program  
Corequisites: None

This course is designed to explore personal and occupational responsibilities of the practicing medical assistant. Emphasis is placed on problems encountered during externships and development of problem-solving skills. Upon completion, students should be able to demonstrate courteous and diplomatic behavior when solving problems in the medical facility.

MED 264	MEDICAL ASSISTING OVERVIEW	2	0	0	2
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Prerequisites: Enrollment in the Medical Assisting program  
Corequisites: None

This course provides an overview of the complete medical assisting curriculum. Emphasis is placed on all facets of medical assisting pertinent to administrative, laboratory, and clinical procedures performed in the medical environment. Upon completion, students should be able to demonstrate competence in the areas covered on the national certification examination for medical assistants.

MED 270	SYMPTOMATOLOGY	2	2	0	3
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Prerequisites: Enrollment in the Medical Assisting program  
Corequisites: None

This course covers the study of disease symptoms and the appropriate actions taken by medical assistants in a medical facility in relation to these symptoms. Emphasis is placed on interviewing skills and appropriate triage, preparing patients for procedures, and screening test results. Upon completion, students should be able to recognize how certain symptoms relate to specific diseases, recognize emergency situations, and take appropriate actions.

MED 272	DRUG THERAPY	3	0	0	3
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Prerequisites: Enrollment in the Medical Assisting program and MED 140  
Corequisites: None

This course focuses on major drug groups, including their side effects, interactions, methods of administration, and proper documentation. Emphasis is placed on the

		Class	Lab	Clin/ WExp	Credit Hours
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theory of drug administration. Upon completion, students should be able to identify, spell, recognize side effects of, and document the most commonly used medications in a physician's office.

MED 276	PATIENT EDUCATION	1	2	0	2
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Prerequisites: Enrollment in the Medical Assisting program  
Corequisites: None

This course is designed to provide communication skills, basic education principles, and knowledge of available community resources and to apply this knowledge to the clinical setting. Emphasis is placed on identifying appropriate community resources, developing patient education materials, and perfecting written and oral communication skills. Upon completion, students should be able to instruct, communicate effectively, and act as a liaison between the patient and community agencies.

### MARKETING AND RETAILING

MKT 120	PRINCIPLES OF MARKETING	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

MKT 121	RETAILING	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course examines the role of retailing in the economy. Topics include the development of present retail structure, functions performed, effective operations, and managerial problems resulting from current economic and social trends. Upon completion, students should be able to demonstrate an understanding of the basic principles of retailing.

MKT 122	VISUAL MERCHANDISING	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course introduces basic layout design and commercial display in retail and service organizations. Topics include an analysis of display as a visual merchandising medium and an examination of the principles and applications of

display and design. Upon completion, students should be able to plan, build, and evaluate designs and displays.

MKT 123	FUNDAMENTALS OF SELLING	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course is designed to emphasize the necessity of selling skills in a modern business environment. Emphasis is placed on sales techniques involved in various types of selling situations. Upon completion, students should be able to demonstrate an understanding of the techniques covered.

MKT 220	ADVERTISING AND SALES PROMOTION	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

MKT 223	CUSTOMER SERVICE	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course stresses the importance of customer relations in the business world. Emphasis is placed on learning how to respond to complex customer requirements and to efficiently handle stressful situations. Upon completion, students should be able to demonstrate the ability to handle customer relations.

MKT 224	INTERNATIONAL MARKETING	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course covers the basic concepts of international marketing activity and theory. Topics include product promotion, placement, and pricing strategies in the international marketing environment. Upon completion, students should be able to demonstrate a basic understanding of the concepts covered.

MKT 225	MARKETING RESEARCH	3	0	0	3
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Prerequisites: MKT 120  
Corequisites: None

This course provides information for decision making by providing guidance in developing, analyzing, and using data. Emphasis is placed on marketing research

as a tool in decision making. Upon completion, students should be able to design and conduct a marketing research project and interpret the results.

MKT 227	MARKETING APPLICATIONS	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course extends the study of diverse marketing strategies. Emphasis is placed on case studies and small-group projects involving research or planning. Upon completion, students should be able to effectively participate in the formulation of a marketing strategy.

MKT 228	SERVICE MARKETING	3	0	3
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Prerequisites: None  
Corequisites: None

This course is designed to define service marketing, demonstrate its importance, and note its special characteristics. Topics include basic building blocks of service marketing, distinctive aspects of services, and applications of service marketing mix. Upon completion, students should be able to demonstrate a basic understanding of the marketing mix as it applies to the service industry.

## MAINTENANCE

MNT 110	INTRODUCTION TO MAINTENANCE PROCEDURES	1	3	0	2
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Prerequisites: None  
Corequisites: None

This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

MNT 111	MAINTENANCE PRACTICES	1	3	0	2
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Prerequisites: MNT 110  
Corequisites: None

This course provides in-depth theory and practical applications relating to predictive and preventive maintenance programs. Emphasis is placed on equipment failure, maintenance management software, and techniques such as vibration and infrared analysis. Upon completion, students should be able to demonstrate an understanding of modern analytical and documentation methods.

		Class	Lab	Clin/ WExp	Credit Hours
MNT 220	RIGGING AND MOVING	1	3	0	2
Prerequisites: None					
Corequisites: None					

This course covers the principles of safe rigging practices for handling, placing, and moving heavy machinery and equipment. Topics include safety estimation, positioning of equipment slings, rollers, jacks, levers, dollies, ropes, chains, padding, and other related topics. Upon completion, students should be able to relocate and set up equipment safely using accepted rigging practices.

MNT 230	PUMPS AND PIPING SYSTEMS	1	3	0	2
Prerequisites: None					
Corequisites: None					

This course covers pump installation and maintenance and related values and piping systems. Topics include various types of pump systems and their associated values, piping requirements, and other related topics. Upon completion, students should be able to select and install pump and piping systems and demonstrate proper maintenance and troubleshooting procedures.

MNT 240	INDUSTRIAL EQUIPMENT TROUBLESHOOTING	1	3	0	2
Prerequisites: ELC 112					
Corequisites: None					

This course covers the various service procedures, tools, instruments, and equipment necessary to analyze and repair typical industrial equipment. Emphasis is placed on electro-mechanical and fluid power equipment troubleshooting and repair, including common techniques and procedures. Upon completion, students should be able to troubleshoot and repair industrial equipment.

## **MAGNETIC RESONANCE IMAGING**

MRI 210	MRI PHYSICS AND EQUIPMENT	3	0	0	3
Prerequisites: Enrollment in CT/MRI diploma or MRI certificate programs					
Corequisites: None					

This course covers the physical principles of image formation, data acquisition, and image processing in magnetic resonance imaging. Emphasis is placed on instrumentation, fundamentals, pulse sequences, data manipulation, imaging parameters, options, and their effects on image quality. Upon completion, students should be able to understand the principles behind image formation, data acquisition, and image processing in magnetic resonance imaging.

MRI 211	MRI PROCEDURES	4	0	0	4
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		Class	Lab	Clin/ WExp	Credit Hours
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Prerequisites: Enrollment in CT/MRI diploma or MRI certificate programs

Corequisites: None

This course covers patient care, magnetic field safety, cross-sectional anatomy, contrast media, and scanning procedures in magnetic resonance imaging. Emphasis is placed on patient assessment and monitoring, safety precautions, contrast agents' use, methods of data acquisition, and identification of cross-sectional anatomy. Upon completion, students should be able to integrate all facets of imaging procedures in magnetic resonance imaging.

MRI 231	MRI CLINICAL PRACTICUM	0	0	33	11
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Prerequisites: Enrollment in CT/MRI diploma or MRI certificate programs

Corequisites: None

This course provides experience in the magnetic resonance clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in magnetic resonance imaging. Upon completion, students should be able to assume a variety of duties and responsibilities within the magnetic resonance clinical environment.

MRI 240	QUALITY ASSURANCE	2	0	0	2
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Prerequisites: Enrollment in CT/MRI diploma or MRI certificate programs

Corequisites: None

This course integrates aspects of MRI as practiced in the classroom and clinical settings. Emphasis is placed on study skills, quality assurance, and content specifications of the ARRT advanced level exam. Upon completion, students should be able to demonstrate an understanding of the topics presented for successful completion of the ARRT exam.

## MUSIC

MUS 110	MUSIC APPRECIATION	3	0	0	3
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Prerequisites: None

Corequisites: None

This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

MUS 112	INTRODUCTION TO JAZZ	3	0	0	3
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Prerequisites: None

Corequisites: None

	Class	Lab	Clin/ WExp	Credit Hours
<p>This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.</i></p>				

## NETWORKING TECHNOLOGY

NET 110	DATA COMMUNICATIONS/ NETWORKING	2	2	0	3
Prerequisites: CIS 110					
Corequisites: CIS 115					

This course introduce data communication and networking for those who have not received credit for NET 115. Topics include telecommunication standards, protocols, equipment, network topologies, communication software, LANs, WANs, the Internet, and network operating systems. Upon completion, students should be able to demonstrate understanding of the fundamentals of telecommunication and networking. At PCC, lab will introduce telecommunications software and hardware, and the netware operating system.

NET 120	NETWORK INSTALLATION/ ADMINISTRATION I	2	2	0	3
Prerequisites: NET 110					
Corequisites: None					

This course covers the installation and administration of network hardware and system software. Topics include network topologies, various network operating systems, server and workstation installation and configuration, printer services, and connectivity options. Upon completion, students should be able to perform basic installation and administration of departmental networks.

## NUCLEAR MEDICINE

NMT 110	INTRODUCTION TO NUCLEAR MEDICINE	2	0	0	2
Prerequisites: Enrollment in Nuclear Medicine program					
Corequisites: None					

This course provides a comprehensive introduction to the field of nuclear medicine. Topics include overview of school, program, and profession; medical terminology and ethics; medical legal issues; general patient care and radiation safety practices;

	Class	Lab	Clin/ WExp	Credit Hours
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and departmental organization. Upon completion, students should be able to utilize various learning resources and demonstrate understanding of radiation safety standards and ethical, professional conduct.

NMT 110A	INTRODUCTION TO NUCLEAR MEDICINE LAB	0	3	0	1
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Prerequisites: Enrollment in Nuclear Medicine program  
Corequisites: NMT 110

This course is a laboratory to accompany NMT 110. Emphasis is placed on laboratory experiences that enhance material presented in NMT 110. Upon completion, students should be able to apply the laboratory experiences to the material presented in NMT 110.

NMT 126	NUCLEAR PHYSICS	2	0	0	2
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Prerequisites: NMT 110  
Corequisites: None

This course introduces the fundamental principles of the physics that underlie nuclear medicine. Topics include atomic structure, electromagnetic and particulate radiation, decay schemes, production of radionuclides with emphasis on radionuclide generators, and decay calculations. Upon completion, students should be able to demonstrate an understanding of the physical concepts covered in the course.

NMT 132	OVERVIEW-CLINICAL NUCLEAR MEDICINE	2	0	6	4
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Prerequisites: NMT 110  
Corequisites: None

This course is designed to familiarize students with the clinical practice of nuclear medicine. Emphasis is placed on the routine clinical procedures, radiopharmaceuticals and dosage, equipment manipulation, and basic patient care. Upon completion, students should be able to demonstrate integration of the principles covered in the classroom with the clinical experience.

NMT 134	NUCLEAR PHARMACY	2	0	0	2
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Prerequisites: NMT 110  
Corequisites: None

This course covers the formulation and application of radiopharmaceuticals. Topics include the preparation, handling, disposition, and quality control of clinically useful radiopharmaceuticals. Upon completion, students should be able to discuss the appropriate use and disposition of radiopharmaceuticals currently used in clinical nuclear medicine.

NMT 136	HEALTH PHYSICS	2	0	0	2
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Prerequisites: NMT 110

Corequisites: None

This course covers the regulations and practices that ensure minimum exposure of patients, co-workers, and self to ionizing radiation. Topics include interactions of radiation with matter, protective practices, state and federal regulatory agencies and their directives, and methods of monitoring exposure. Upon completion, students should be able to demonstrate an understanding of the regulations and practices presented in the course.

NMT 211	NMT CLINICAL PRACTICE I	0	0	21	7
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Prerequisites: NMT 132

Corequisites: None

This course is one of two courses designed to provide clinical practice in nuclear medicine. Topics include radiation protection, radiopharmaceutical use, patient care, imaging procedures, non-imaging procedures, administrative procedures, and the therapeutic use of radionuclide. Upon completion, students should be able to demonstrate performance of the procedures covered in the course.

NMT 212	PROCEDURES FOR NUCLEAR MEDICINE I	2	0	0	2
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Prerequisites: NMT 132

Corequisites: None

This course begins the in-depth study of clinical procedures performed by nuclear medicine technologists. Emphasis is placed on dose administration, use of instrumentation, computer applications, and normal and abnormal presentation. Upon completion, students should be able to demonstrate an understanding of the principles related to the procedures presented in the course.

NMT 212A	PROCEDURES FOR NUCLEAR MEDICINE I LAB	0	3	0	1
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Prerequisites: NMT 132

Corequisites: NMT 212

This course is a laboratory to accompany NMT 212. Emphasis is placed on experiences that enhance material presented in NMT 212. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in NMT 212.

NMT 214	RADIOBIOLOGY	2	0	0	2
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Prerequisites: NMT 132

Corequisites: None

This course covers the principles of radiation biology. Emphasis is placed on a system's sensitivity to radiation, radiation pathology, and the biological effects of

	Class	Lab	Clin/ WExp	Credit Hours
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radiation. Upon completion, students should be able to demonstrate an understanding of the effects of radiation in nuclear medicine.

NMT 215	NON-IMAGING INSTRUMENTATION	1	3	0	2
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Prerequisites: NMT 132  
Corequisites: None

This course covers the proper operation of various types of non-imaging equipment used in nuclear medicine. Emphasis is placed on principles of radiation detection, quality control procedures, various counting problems, and machine-specific operating procedures. Upon completion, students should be able to demonstrate the proper use of the devices discussed in the course.

NMT 218	COMPUTERS IN NUCLEAR MEDICINE	2	0	0	2
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Prerequisites: NMT 132  
Corequisites: None

This course provides a general introduction to the operation of computers and the application of computers to the field of nuclear medicine. Topics include number systems, major system components, input/output devices, and acquisition and processing of nuclear medicine images. Upon completion, students should be able to demonstrate an understanding of the concepts presented.

NMT 221	NMT CLINICAL PRACTICE II	0	0	21	7
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Prerequisites: NMT 132  
Corequisites: None

This course is one of two courses designed to provide clinical practice in nuclear medicine. Topics include radiation protection, radiopharmaceutical use, patient care, imaging procedures, non-imaging procedures, administrative procedures, and the therapeutic use of radionuclides. Upon completion, students should be able to demonstrate performance of the procedures covered in this course.

NMT 222	PROCEDURES FOR NUCLEAR MEDICINE II	2	3	0	3
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Prerequisites: NMT 132  
Corequisites: None

This course concludes the in-depth study of clinical procedures performed in nuclear medicine. Topics include method of dose administration, data acquisition parameters, computer use, and data patterns consistent with normal and described pathological states. Upon completion, students should be able to demonstrate an understanding of the principles related to the procedures discussed in the course.

NMT 222A	PROCEDURES FOR NUCLEAR MEDICINE II LAB	0	3	0	1
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Prerequisites: NMT 132

Corequisites: NMT 222

This course is a laboratory to accompany NMT 222. Emphasis is placed on experiences that enhance material presented in NMT 222. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in NMT 222.

NMT 225	IMAGING INSTRUMENTATION	1	3	0	2
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Prerequisites: NMT 132  
Corequisites: None

This course covers the operations of various imaging equipment used in nuclear medicine. Emphasis is placed on planar and SPECT gamma cameras. Upon completion, students should be able to safely operate and evaluate performance characteristics of the equipment discussed in the course.

## NURSING

NUR 110	NURSING I	5	3	6	8
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Prerequisites: Admission to the Associate Degree Nursing program  
Corequisites: None

This course introduces concepts basic to beginning nursing practice. Emphasis is placed on introducing the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to demonstrate beginning competence in caring for individuals with common alterations in health.

NUR 120	NURSING II	5	3	6	8
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Prerequisites: NUR 110 and 1st semester courses in curriculum master plan  
Corequisites: None

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on developing the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to participate in the delivery of nursing care for individuals with common alterations in health.

NUR 130	NURSING III	4	3	6	7
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Prerequisites: NUR 120 and 2nd semester courses in curriculum master plan  
Corequisites: None

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on expanding the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon

completion, students should be able to deliver nursing care to individuals with common alterations in health.

NUR 210	NURSING IV	5	3	12	10
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Prerequisites: NUR 130 and 3rd semester courses in curriculum master plan  
Corequisites: None

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on using collaboration as a provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to modify nursing care for individuals with common alterations in health.

NUR 220	NURSING V	4	3	15	10
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Prerequisites: NUR 210 and 4th semester courses in curriculum master plan  
Corequisites: None

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on the nurse's role as an independent provider and manager of care for a group of individuals and member of a multidisciplinary team. Upon completion, students should be able to provide comprehensive nursing care to a group of individuals with common complex health alterations.

## OPERATIONS MANAGEMENT

OMT 132	ISO 9000 STANDARDS	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course covers the current version of the ISO 9000 series of standards. Topics include the ISO 9000 series of standards and proper implementation of these standards in an organization. Upon completion, students should be able to identify the proper ISO standard for registration and demonstrate a detailed understanding of each standard.

OMT 133	ISO 9000 INTERNAL AUDITOR	3	0	0	3
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Prerequisites: OMT 132  
Corequisites: None

This course covers the topics necessary in order to conduct an internal quality audit that complies with the proper ISO 9000 standard. Topics include audit planning, conducting internal audits, audit communication, and corrective action follow-up reports. Upon completion, students should be able to demonstrate a proficiency in auditing techniques for conducting internal quality audits.

## OFFICE SYSTEMS TECHNOLOGY

OST 080	KEYBOARDING LITERACY	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course is designed to develop elementary keyboarding skills. Emphasis is placed on mastery of the keyboard. Upon completion, students should be able to demonstrate basic proficiency in keyboarding.

OST 103	BASIC MEDICAL TERMINOLOGY	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the construction of medical terms. Topics include Greek and Latin prefixes, combining forms, word roots, abbreviations, and symbols. Upon completion, students should be able to pronounce, spell, and define medical terms.

OST 131	KEYBOARDING	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.

OST 134	TEXT ENTRY AND FORMATTING	3	2	0	4
Prerequisites: OST 131					
Corequisites: None					

This course is designed to provide the skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce mailable documents.

OST 136	WORD PROCESSING	1	2	0	2
Prerequisites: OST 080 or appropriate placement test score					
Corequisites: None					

This course introduces word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment.

OST 137	OFFICE SOFTWARE APPLICATIONS	1	2	0	2
Prerequisites: OST 131					
Corequisites: None					

This course introduces the concepts and functions of software that meets the changing needs of the community. Emphasis is placed on the terminology and use of software through a hands on approach. Upon completion, students should be able to use software in a business environment.

OST 148	MEDICAL CODING BILLING AND INSURANCE	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces CPT and ICD coding as they apply to medical insurance and billing. Emphasis is placed on accuracy in coding, forms preparation, and posting. Upon completion, students should be able to describe the steps of the total billing cycle and explain the importance of accuracy.

OST 149	MEDICAL LEGAL ISSUES	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.

OST 164	TEXT EDITING APPLICATIONS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

OST 184	RECORDS MANAGEMENT	1	2	0	2
Prerequisites: None					
Corequisites: None					

This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system.

OST 197	SEMINAR IN OFFICE SYSTEMS TECHNOLOGY	2	0	0	2
Prerequisites: None					

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

OST 223	MACHINE TRANSCRIPTION I	1	2	0	2
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Prerequisites: OST 134, OST 136, and OST 164

Corequisites: None

This course covers the use of transcribing machines to produce mailable documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe documents into mailable copy.

OST 224	MACHINE TRANSCRIPTION II	1	2	0	2
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Prerequisites: OST 223

Corequisites: None

This course provides advanced transcription skills. Emphasis is placed on specialized transcription features. Upon completion, students should be able to transcribe complex business documents into mailable copy with minimal assistance.

OST 233	OFFICE PUBLICATIONS DESIGN	2	2	0	3
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Prerequisites: OST 136

Corequisites: None

This course provides entry-level skills in using software with desktop publishing capabilities. Topics include principles of page layout, desktop publishing terminology and applications, and legal and ethical considerations of software use. Upon completion, students should be able to design and produce professional business documents and publications.

OST 236	ADVANCED WORD/ INFORMATION PROCESSING	2	2	0	3
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Prerequisites: OST 136

Corequisites: None

This course develops proficiency in the utilization of advanced word/information processing functions. Topics include tables, graphics, macros, sorting, document assembly, merging, and newspaper and brochure columns. Upon completion, students should be able to produce a variety of complex business documents.

OST 241	MEDICAL OFFICE TRANSCRIPTION I	1	2	0	2
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Prerequisites: MED 121

Corequisites: None

This course introduces machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as vocabulary building. Upon completion, students should be able to prepare accurate and usable transcripts of voice recordings in the covered specialties.

OST 242	MEDICAL OFFICE TRANSCRIPTION II	1	2	0	2
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Prerequisites: OST 241

Corequisites: None

This course continues building machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as continued proofreading/editing skills and vocabulary building. Upon completion, students should be able to perform competently in preparing accurate and usable transcripts of voice recordings in the covered specialties.

OST 243	MEDICAL OFFICE SIMULATION	2	2	0	3
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Prerequisites: OST 131 and OST 148

Corequisites: None

This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections.

OST 247	CPT CODING IN THE MEDICAL OFFICE	1	2	0	2
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Prerequisites: MED 122

Corequisites: None

This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS rules for Medicare billing. Upon completion, students should be able to properly code procedures and services performed by physicians in ambulatory settings.

OST 248	DIAGNOSTIC CODING	1	2	0	2
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Prerequisites: MED 122

Corequisites: None

This courses provides an in-depth study of diagnostic coding for the medical office. Emphasis is placed on ICD-9-CM codes used on superbills and other encounter forms. Upon completion, students should be able to apply the principles of diagnostic coding in the physician's office.

		Class	Lab	Clin/ WExp	Credit Hours
OST 284	EMERGING TECHNOLOGIES	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course provides opportunities to explore emerging technologies. Emphasis is placed on identifying, researching, and presenting current technological topics for class consideration and discussion. Upon completion, students should be able to understand the importance of keeping abreast of technological changes that affect the office professional.

OST 289	OFFICE SYSTEMS MANAGEMENT	2	2	0	3
Prerequisites: OST 134, OST 136, and OST 164					
Corequisites: None					

This course provides a capstone course for the office professional. Topics include administrative office procedures, imaging, communication techniques, ergonomics, and equipment utilization. Upon completion, students should be able to function proficiently in a changing office environment.

## OCCUPATIONAL THERAPY ASSISTANT

OTA 110	FUNDAMENTALS OF OT	2	3	0	3
Prerequisites: Enrollment in the Occupational Therapy Assistant program					
Corequisites: BIO 165 or BIO 168					

This course introduces occupational therapy theory, practice, philosophy, and principles. Emphasis is placed on providing a basic understanding of the profession as well as beginning to develop interaction and observation skills. Upon completion, students should be able to demonstrate basic understanding of OT practice options, uniform terminology, activity analysis, principles, process, philosophies, and frames of reference.

OTA 120	OT MEDIA I	1	3	0	2
Prerequisites: Enrollment in the Occupational Therapy Assistant program					
Corequisites: OTA 110					

This course provides training in recognizing the therapeutic value of and using a wide variety of leisure, self-care, and work activities. Topics include crafts, games, personal care and work activities, as well as teaching and learning methods and styles. Upon completion, students should be able to design, select, and complete/perform leisure, self-care, and work activities that would be therapeutic for designated client populations.

OTA 130	ASSESSMENT SKILLS	2	3	0	3
Prerequisites: Enrollment in the Occupational Therapy Assistant program					

		Class	Lab	Clin/ WExp	Credit Hours
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Corequisites: OTA 110

This course provides training in appropriate and accurate assessment and intervention skills related to sensory, movement, perceptual/cognitive, affective systems, and ADL skills. Topics include kinesiology, body mechanics, sensory, ROM, MMT, cognitive/perceptual, psychosocial, self-care, and work-related assessments; treatment approaches; and basics of group structure and dynamics. Upon completion, students should be able to administer various assessment tools and appropriate treatment approaches regarding sensation, movement, perception/cognition, affect, self-care, and work-related skills.

OTA 140	PROFESSIONAL SKILLS I	0	3	0	1
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Prerequisites: Enrollment in the Occupational Therapy Assistant program

Corequisites: OTA 110

This course introduces the roles and responsibilities of COTAs/OTRs in OT practice and facilitates development of observation, documentation, and therapeutic use of self skills. Topics include Code of Ethics, roles/responsibilities, credentialing/licensing, documentation, therapeutic use of self and professional identity/behavior, supervisory relationships, time management, and observation skills. Upon completion, students should be able to demonstrate ethical behavior, discriminate between roles/responsibilities of COTAs/OTRs, and participate in acceptable supervision, documentation, and scheduling.

OTA 150	LIFE SPAN SKILLS I	2	3	0	3
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Prerequisites: Enrollment in the Occupational Therapy Assistant program

Corequisites: PSY 241 and OTA 170

This course is designed to use knowledge gained from PSY 241 as it applies to OT practice from birth to adolescence. Topics include review of normal growth and development, identification/discussion of common disabilities/delays, assessment, treatment planning, and intervention approaches used with these populations. Upon completion, students should be able to identify/use assessments/screenings and interventions for infants through adolescents for selected disabilities/developmental delays in various settings.

OTA 161	FIELDWORK I-PLACEMENT 1	0	0	3	1
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Prerequisites: OTA 120 and OTA 140

Corequisites: OTA 130

This course provides introductory-level clinical training opportunities. Emphasis is placed on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance/direction of fieldwork supervisors.

OTA 162	FIELDWORK I-PLACEMENT 2	0	0	3	1
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Prerequisites: OTA 120 and OTA 140

Corequisites: OTA 130

This course provides introductory-level clinical training opportunities. Emphasis is placed on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance/direction of fieldwork supervisors.

OTA 163	FIELDWORK I-PLACEMENT 3	0	0	3	1
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Prerequisites: OTA 120 and OTA 140

Corequisites: OTA 130

This course provides introductory-level clinical training opportunities. Emphasis is placed on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance/direction of fieldwork supervisors.

OTA 170	PHYSICAL DYSFUNCTION	2	3	0	3
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Prerequisites: OTA 130

Corequisites: None

This course is designed to provide knowledge and skills needed for working with individuals experiencing varied medical/physical conditions within their socioeconomic and cultural environments. Topics include medical terminology, common diagnoses, structures/functions that change with disease processes, assessment/treatment priorities for specific problems/conditions, treatment planning, and intervention. Upon completion, students should be able to recognize common symptoms, prioritize problems, and provide for patient safety and infection control when planning and implementing treatment.

OTA 180	PSYCHOSOCIAL DYSFUNCTION	2	3	0	3
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Prerequisites: OTA 130 and PSY 281

Corequisites: None

This course uses theories/principles related to psychological/psychiatric health and illnesses and provides training in assessing/treating symptoms of dysfunction and therapeutic use of self and groups. Topics include psychiatric illnesses, symptoms of dysfunction, assessment and treatment of individuals, planning and facilitating therapeutic groups, client safety, and psychosocial aspects of practice. Upon completion, students should be able to effectively plan and conduct individual and group treatment for client conditions related to psychosocial dysfunction recognizing temporal/socioeconomic/cultural contexts.

OTA 220	OT MEDIA II	1	6	0	3
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Prerequisites: OTA 120 and OTA 130

		Class	Lab	Clin/ WExp	Credit Hours
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Corequisites: CIS 111

This course provides training in appropriate and accurate assessment and intervention skills related to orthotics, prosthetics, assistive devices, environmental controls, and ADA issues. Topics include ergonomics and hand function, splint selection/fabrication, changes that improve access for persons with disabilities, use of modalities in treatment, and computers in OT intervention. Upon completion, students should be able to demonstrate proficiency fabricating/monitoring orthotic devices, constructing/modifying assistive devices, using ADA guidelines, and using computers for therapeutic purposes.

OTA 240	PROFESSIONAL SKILLS II	0	3	0	1
Prerequisites: OTA 140					
Corequisites: ENG 114					

This course builds upon and expands skills developed in OTA 140 with emphasis on documentation, supervisory relationships, involvement in the profession, and clinical management skills. Topics include clarification of roles/responsibilities, detailed examination of the supervisory process, professional participation in organizations, and the mechanics of assisting in clinic operations. Upon completion, students should be able to work effectively with a supervisor, plan/implement a professional activity, and perform routine clinic management tasks. At PCC, students will also learn the role of the COTA in research.

OTA 250	LIFE SPAN SKILLS II	2	3	0	3
Prerequisites: Enrollment in the Occupational Therapy Assistant program					
Corequisites: PSY 241, OTA 170, and OTA 180					

This course uses knowledge gained from PSY 241 as it applies to OT practice from young adulthood through old age. Emphasis is placed on identification/discussion of common disabilities/chronic diseases, assessments, planning and interventions used with these populations, and activity programming. Upon completion, students should be able to identify/use assessments, interventions, and activities for adults with selected disabilities/losses in various settings. At PCC, students will also use a case study format to sharpen clinical reasoning skills and enhance activity development.

OTA 260	FIELDWORK II-PLACEMENT 1	0	0	18	6
Prerequisites: Successful completion of all required OTA curriculum courses except OTA 261 and OTA 280					
Corequisites: This course must be completed within 18 months of the completion of all other OTA course work					

This course provides clinical experience under the direct supervision of experienced OTR or COTA personnel working in various practice settings. Emphasis is placed on final clinical preparation for entry-level practice in the profession. Upon

completion, students should be able to meet all critical competencies established by the curriculum and AOTA guidelines for entry-level practice.

OTA 261	FIELDWORK II-PLACEMENT 2	0	0	18	6
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Prerequisites: Successful completion of all required OTA curriculum courses except OTA 260 and OTA 280

Corequisites: This course must be completed within 18 months of the completion of all other OTA course work

This course provides clinical experience under the direct supervision of experienced OTR or COTA personnel working in various practice settings. Emphasis is placed on final clinical preparation for entry-level practice in the profession. Upon completion, students should be able to meet all critical competencies established by the curriculum and AOTA guidelines for entry-level practice.

## PHYSICAL EDUCATION

PED 110	FIT AND WELL FOR LIFE	1	2	0	2
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Prerequisites: None

Corequisites: None

This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests.

PED 111	PHYSICAL FITNESS I	0	3	0	1
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Prerequisites: None

Corequisites: None

This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program.

PED 112	PHYSICAL FITNESS II	0	3	0	1
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Prerequisites: PED 111

Corequisites: None

This course is an intermediate-level fitness class. Topics include specific exercises contributing to fitness and the role exercise plays in developing body systems. Upon completion, students should be able to implement and evaluate an individualized physical fitness program.

		Class	Lab	Clin/ WExp	Credit Hours
PED 113	AEROBICS I	0	3	0	1
Prerequisites: None					
Corequisites: None					

This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program.

PED 114	AEROBICS II	0	3	0	1
Prerequisites: PED 113					
Corequisites: None					

This course provides a continuation of a program of cardiovascular fitness involving rhythmic exercise. Emphasis is placed on a wide variety of aerobic activities which include cardiovascular efficiency, strength, and flexibility. Upon completion, students should be able to participate in and design a rhythmic aerobic exercise routine.

PED 117	WEIGHT TRAINING I	0	3	0	1
Prerequisites: None					
Corequisites: None					

This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program.

PED 118	WEIGHT TRAINING II	0	3	0	1
Prerequisites: PED 117					
Corequisites: None					

This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program.

PED 125	SELF-DEFENSE-BEGINNING	0	2	0	1
Prerequisites: None					
Corequisites: None					

This course is designed to aid students in developing rudimentary skills in self-defense. Emphasis is placed on stances, blocks, punches, and kicks as well as non-physical means of self-defense. Upon completion, students should be able to demonstrate basic self-defense techniques of a physical and non-physical nature.

PED 126	SELF-DEFENSE-INTERMEDIATE	0	2	0	1
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Prerequisites: PED 125

Corequisites: None

This course is designed to aid students in building on the techniques and skills developed in PED 127. Emphasis is placed on the appropriate psychological and physiological responses to various encounters. Upon completion, students should be able to demonstrate intermediate skills in self-defense stances, blocks, punches, and kick combinations.

PED 130	TENNIS-BEGINNING	0	2	0	1
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Prerequisites: None

Corequisites: None

This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis.

PED 131	TENNIS-INTERMEDIATE	0	2	0	1
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Prerequisites: PED 130

Corequisites: None

This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, strokes, pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis.

PED 137	BADMINTON	0	2	0	1
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Prerequisites: None

Corequisites: None

This course covers the fundamentals of badminton. Emphasis is placed on the basics of serving, clears, drops, drives, smashes, and the rules and strategies of singles and doubles. Upon completion, students should be able to apply these skills in playing situations.

PED 139	BOWLING-BEGINNING	0	2	0	1
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Prerequisites: None

Corequisites: None

This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling.

PED 142	LIFETIME SPORTS	0	2	0	1
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Prerequisites: None

Corequisites: None

		Class	Lab	Clin/ WExp	Credit Hours
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This course is designed to give an overview of a variety of sports activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime sports. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime sports activities.

PED 143	VOLLEYBALL-BEGINNING	0	2	0	1
Prerequisites: None					
Corequisites: None					

This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball.

PED 144	VOLLEYBALL-INTERMEDIATE	0	2	0	1
Prerequisites: PED 143					
Corequisites: None					

This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball.

PED 148	SOFTBALL	0	2	0	1
Prerequisites: None					
Corequisites: None					

This course introduces the fundamental skills and rules of softball. Emphasis is placed on proper techniques and strategies for playing softball. Upon completion, students should be able to participate in recreational softball.

PED 150	BASEBALL/BEGINNING	0	3	0	1
Prerequisites: None					
Corequisites: None					

This course covers the fundamentals of baseball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational baseball.

PED 151	BASEBALL/INTERMEDIATE	0	3	0	1
Prerequisites: PED 151					
Corequisites: None					

This course covers more advanced baseball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play baseball at a competitive level.

		Class	Lab	Clin/ WExp	Credit Hours
PED 220	EXERCISE FOR THE PHYSICALLY CHALLENGED	0	2	0	1

Prerequisites: None

Corequisites: None

This course is designed to improve physical strength, endurance, and range of motion while focusing on individual needs. Emphasis is placed on exercises which are designed and adapted to serve those with special needs. Upon completion, students should be able to show improved physical fitness, body awareness, and an appreciation for their physical well being.

## PIPE FITTING

PFT 111	PIPING AND VALVES	3	3	0	4
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Prerequisites: None

Corequisites: None

This course introduces the terminology, uses, types, and components of metallic and nonmetallic industrial piping systems. Topics include identification and application of valves and fittings, joining techniques, drawing interpretation, and the safe installation of piping systems. Upon completion, students should be able to select the proper materials and equipment to safely construct basic industrial piping systems in accordance with design drawing.

PFT 211	PIPING SYSTEMS INSTALLATION	3	3	0	4
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Prerequisites: PFT 111

Corequisites: None

This course covers procedures for cutting, threading, welding, supporting, testing, and installing complex piping systems. Topics include pipe setup, cutting/installing gaskets, fluid flow, pipe support methods, piping layout, and other related topics. Upon completion, students should be able to select the proper materials and equipment to safely construct complex industrial piping systems.

PFT 212	PIPING SYSTEMS MAINTENANCE AND REPAIR	2	3	0	3
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Prerequisites: PFT 211

Corequisites: None

This course covers procedures for the proper maintenance and repair of industrial and process piping components. Topics include maintenance and repair of pipes, valves, strainers, heat exchangers, steam traps, boiler tubes, and other piping-system devices. Upon completion, students should be able to maintain, repair, and test piping-system components found in complex industrial operations.

		Class	Lab	Clin/ WExp	Credit Hours
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## PHILOSOPHY

PHI 210	HISTORY OF PHILOSOPHY	3	0	0	3
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Prerequisites: ENG 111

Corequisites: None

This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao-Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

PHI 230	INTRODUCTION TO LOGIC	3	0	0	3
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Prerequisites: ENG 111

Corequisites: None

This course introduces basic concepts and techniques for distinguishing between good and bad reasoning. Emphasis is placed on deduction, induction, validity, soundness, syllogisms, truth functions, predicate logic, analogical inference, common fallacies, and scientific methods. Upon completion, students should be able to analyze arguments, distinguish between deductive and inductive arguments, test validity, and appraise inductive reasoning.

PHI 240	INTRODUCTION TO ETHICS	3	0	0	3
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Prerequisites: ENG 111

Corequisites: None

This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## PHYSICS

PHY 110	CONCEPTUAL PHYSICS	3	0	0	3
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Prerequisites: ENG 095

Corequisites: PHY 110A

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion,

forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

PHY 110A	CONCEPTUAL PHYSICS LAB	0	2	0	1
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Prerequisites: ENG 095  
Corequisites: PHY 110

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

PHY 125	HEALTH SCIENCES PHYSICS	3	2	0	4
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Prerequisites: ENG 095  
Corequisites: None

This course introduces fundamental physical principles as they apply to health technologies. Topics include motion, force, work, power, simple machines, and other topics as required by the students' area of study. Upon completion, students should be able to demonstrate an understanding of the fundamental principles covered as they relate to practical applications in the health sciences.

PHY 131	PHYSICS-MECHANICS	3	2	0	4
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Prerequisites: MAT 121 or MAT 161  
Corequisites: None

This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

PHY 151	COLLEGE PHYSICS I	3	2	0	4
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Prerequisites: MAT 162  
Corequisites: None

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display

		Class	Lab	Clin/ WExp	Credit Hours
<p>analytical problem-solving ability for the topics covered. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.</i></p>					

PHY 152	COLLEGE PHYSICS II	3	2	0	4
Prerequisites: PHY 151					
Corequisites: None					

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics.*

### POLITICAL SCIENCE

POL 120	AMERICAN GOVERNMENT	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

POL 130	STATE AND LOCAL GOVERNMENT	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual.

## PSYCHOLOGY

PSY 102	HUMAN RELATIONS	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course covers the skills necessary to handle human relationships effectively. Topics include self-understanding, interpersonal communication, group dynamics, leadership skills, diversity, time and stress management, and conflict resolution with emphasis on work relationships. Upon completion, students should be able to demonstrate improved personal and interpersonal effectiveness.

PSY 115	STRESS MANAGEMENT	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course covers stressors and techniques for stress management. Topics include anger, assertiveness, adaptation to change, conflict, coping skills, identification of stressors, time management, and the physiology of stress and burnout. Upon completion, students should be able to demonstrate an understanding of the effective management of stress.

PSY 118	INTERPERSONAL PSYCHOLOGY	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.

PSY 135	GROUP PROCESSES	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course provides an examination of group dynamics and structure. Topics include team-building, interpersonal communication, leadership, decision making, and problem solving. Upon completion, students should be able to demonstrate the knowledge and skills necessary for effective group participation.

PSY 141	PSYCH OF DEATH AND DYING	3	0	0	3
Prerequisites: None					
Corequisites: None					

		Class	Lab	Clin/ WExp	Credit Hours
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This course presents psychological perspectives on death and dying. Topics include the culturally diverse aspects of death and the grieving process, adjustment mechanisms, interventions, and the psychological and ethical dimensions of death and dying. Upon completion, students should be able to demonstrate an understanding of the psychosocial aspects of death and dying.

PSY 150	GENERAL PSYCHOLOGY	3	0	0	3
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Prerequisites: None  
Corequisites: None

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

PSY 211	PSYCHOLOGY OF ADJUSTMENT	3	0	0	3
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Prerequisites: PSY 150  
Corequisites: None

This course introduces the study of the adjustment process focusing on contemporary challenges individuals must deal with in everyday life. Topics include theories of behavior, career choices, self-understanding, coping mechanisms, human relationships, intimacy, sociocultural factors influencing healthy personal adjustment, and other related topics. Upon completion, students should be able to demonstrate an awareness of the processes of adjustment.

PSY 237	SOCIAL PSYCHOLOGY	3	0	0	3
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Prerequisites: PSY 150 or SOC 210  
Corequisites: None

This course introduces the study of individual behavior within social contexts. Topics include affiliation, attitude formation and change, conformity, altruism, aggression, attribution, interpersonal attraction, and group behavior. Upon completion, students should be able to demonstrate an understanding of the basic principles of social influences on behavior.

PSY 241	DEVELOPMENTAL PSYCHOLOGY	3	0	0	3
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Prerequisites: PSY 150  
Corequisites: None

This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life

span. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

PSY 243	CHILD PSYCHOLOGY	3	0	0	3
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Prerequisites: PSY 150  
Corequisites: None

This course provides an overview of physical, cognitive, and psychosocial development from conception through adolescence. Topics include theories and research, interaction of biological and environmental factors, language development, learning and cognitive processes, social relations, and moral development. Upon completion, students should be able to identify typical and atypical childhood behavior patterns as well as appropriate strategies for interacting with children.

PSY 244	CHILD DEVELOPMENT I	3	0	0	3
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Prerequisites: PSY 150  
Corequisites: None

This course provides an introduction to the study of child development and examines the growth and development of children from conception through early childhood. Topics include historical and theoretical perspectives, terminology, research and observation techniques as well as physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of the early stages of child development.

PSY 245	CHILD DEVELOPMENT II	3	0	0	3
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Prerequisites: PSY 244  
Corequisites: None

This course examines the growth and development of children during early and middle childhood. Emphasis is placed on factors influencing physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of early and middle child development.

PSY 246	ADOLESCENT PSYCHOLOGY	3	0	0	3
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Prerequisites: PSY 150  
Corequisites: None

This course provides an overview of the behavior patterns, life changes, and social issues that accompany the developmental stage of adolescence. Topics include developmental theories; physical, cognitive and psychosocial growth; transitions to young adulthood; and sociocultural factors that influence adolescent roles in home, school and community. Upon completion, students should be able to identify typical and atypical adolescent behavior patterns as well as appropriate strategies for interacting with adolescents.

PSY 255	INTRODUCTION TO EXCEPTIONALITY	3	0	0	3
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Prerequisites: PSY 150

Corequisites: None

This course introduces the psychology of the exceptional person. Topics include theoretical perspectives, terminology, and interventions pertaining to various handicapping conditions as well as the resulting psychosocial adjustments. Upon completion, students should be able to demonstrate a basic understanding of the potentials and limitations of the exceptional person.

PSY 265	BEHAVIORAL MODIFICATION	3	0	0	3
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Prerequisites: PSY 150

Corequisites: None

This course is an applied study of factors influencing human behavior and strategies for behavioral change. Emphasis is placed on cognitive-behavioral theory, behavioral assessment, practical applications of conditioning techniques, and maintenance of adaptive behavior patterns. Upon completion, students should be able to implement basic learning principles to effect behavioral changes in self and others.

PSY 281	ABNORMAL PSYCHOLOGY	3	0	0	3
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Prerequisites: PSY 150

Corequisites: None

This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

## RADIOGRAPHY

RAD 110	RADIOGRAPHY INTRODUCTION AND PATIENT CARE	2	3	0	3
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Prerequisites: Enrollment in Radiography program

Corequisites: RAD 111 and RAD 151

This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas.

		Class	Lab	Clin/ WExp	Credit Hours
RAD 111	RADIOGRAPHIC PROCEDURES I	3	3	0	4
Prerequisites: Enrollment in the Radiography program					
Corequisites: RAD 110 and RAD 151					

This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, spine, and pelvis. Upon completion, students should be able to demonstrate competence in these areas.

RAD 112	RADIOGRAPHIC PROCEDURES II	3	3	0	4
Prerequisites: RAD 110, RAD 111, and RAD 151					
Corequisites: RAD 121 and RAD 161					

This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, bony thorax, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas.

RAD 121	RADIOGRAPHIC IMAGING I	2	3	0	3
Prerequisites: RAD 110, RAD 111, and RAD 151					
Corequisites: RAD 112 and RAD 161					

This course covers factors of image quality and methods of exposure control. Topics include density, contrast, recorded detail, distortion, technique charts, manual and automatic exposure control, and tube rating charts. Upon completion, students should be able to demonstrate an understanding of exposure control and the effects of exposure factors on image quality.

RAD 122	RADIOGRAPHIC IMAGING II	1	3	0	2
Prerequisites: RAD 112, RAD 121, and RAD 161					
Corequisites: RAD 131 and RAD 171					

This course covers image receptor systems and processing principles. Topics include film, film storage, processing, intensifying screens, grids, and beam limitation. Upon completion, students should be able to demonstrate the principles of selection and usage of imaging accessories to produce quality images.

RAD 131	RADIOGRAPHIC PHYSICS I	1	3	0	2
Prerequisites: RAD 112, RAD 121, and RAD 161					
Corequisites: RAD 122 and RAD 171					

This course introduces the fundamental principles of physics that underlie diagnostic X-ray production and radiography. Topics include electromagnetic waves, electricity and magnetism, electrical energy, and power and circuits as they relate to radiography. Upon completion, students should be able to demonstrate an understanding of basic principles of physics as they relate to the operation of radiographic equipment.

		<b>Class</b>	<b>Lab</b>	<b>Clin/ WExp</b>	<b>Credit Hours</b>
<b>RAD 151</b>	<b>RAD CLINICAL EDUCATION I</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>2</b>
<b>Prerequisites:</b> Enrollment in the Radiography program					
<b>Corequisites:</b> RAD 110 and RAD 111					

This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

<b>RAD 161</b>	<b>RAD CLINICAL EDUCATION II</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>5</b>
<b>Prerequisites:</b> RAD 110, RAD 111, and RAD 151					
<b>Corequisites:</b> RAD 112 and RAD 121					

This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax, and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

<b>RAD 171</b>	<b>RAD CLINICAL EDUCATION III</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>4</b>
<b>Prerequisites:</b> RAD 112, RAD 121, and RAD 161					
<b>Corequisites:</b> RAD 122 and RAD 131					

This course provides experience in patient management specific to fluoroscopic and advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and mastering positioning of gastrointestinal and urological studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

<b>RAD 211</b>	<b>RADIOGRAPHIC PROCEDURES III</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>3</b>
<b>Prerequisites:</b> RAD 112 and RAD 122					
<b>Corequisites:</b> RAD 231, RAD 241, and RAD 251					

This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, pathology, and advanced imaging. Upon completion, students should be able to demonstrate competence in these areas.

<b>RAD 231</b>	<b>RADIOGRAPHIC PHYSICS II</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>
<b>Prerequisites:</b> RAD 122, RAD 131, and RAD 171					
<b>Corequisites:</b> RAD 211, RAD 241, and RAD 251					

This course continues the study of physics that underlie diagnostic X-ray production and radiographic and fluoroscopic equipment. Topics include X-ray production, electromagnetic interactions with matter, X-ray devices, equipment circuitry, targets, filtration, and dosimetry. Upon completion, students should be

able to demonstrate an understanding of the application of physical concepts as related to image production.

RAD 241	RADIATION PROTECTION	2	0	0	2
Prerequisites: RAD 122, RAD 131, and RAD 171					
Corequisites: RAD 211, RAD 231, and RAD 251					

This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology.

RAD 245	RADIOGRAPHIC ANALYSIS	2	3	0	3
Prerequisites: RAD 211, RAD 231, RAD 241, and RAD 251					
Corequisites: RAD 261					

This course provides an overview of imaging concepts and introduces methods of quality assurance. Topics include a systematic approach for image evaluation and analysis of imaging service and quality assurance. Upon completion, students should be able to establish and administer a quality assurance program and conduct a critical review of images.

RAD 251	RAD CLINICAL EDUCATION IV	0	0	21	7
Prerequisites: RAD 122, RAD 131, and RAD 171					
Corequisites: RAD 211, RAD 231, and RAD 241					

This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and a further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD 261	RAD CLINICAL EDUCATION V	0	0	21	7
Prerequisites: RAD 211, RAD 231, RAD 241, and RAD 251					
Corequisites: RAD 245					

This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

		Class	Lab	Clin/ WExp	Credit Hours
<b>RESPIRATORY CARE</b>					
RCP 110	INTRODUCTION TO RESPIRATORY CARE		3	3	0 4
Prerequisites: Enrollment in the Respiratory Care program					
Corequisites: None					

This course introduces the respiratory care profession. Topics include the role of the respiratory care practitioner, medical gas administration, basic patient assessment, infection control, and medical terminology. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations.

RCP 111	THERAPEUTICS/DIAGNOSTICS	4	3	0	5
Prerequisites: RCP 110					
Corequisites: None					

This course is a continuation of RCP 110. Emphasis is placed on entry-level therapeutic and diagnostic procedures used in respiratory care. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations.

RCP 112	PATIENT MANAGEMENT	3	3	0	4
Prerequisites: RCP 111					
Corequisites: None					

This course provides entry-level skills in adult/pediatric mechanical ventilation and respiratory care procedures in traditional and alternative settings. Emphasis is placed on therapeutic modalities and physiological effects of cardiopulmonary rehabilitation, home care, mechanical ventilation, and monitoring. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations.

RCP 113	RCP PHARMACOLOGY	2	0	0	2
Prerequisites: Enrollment in the Respiratory Care program					
Corequisites: None					

This course covers the drugs used in the treatment of cardiopulmonary diseases. Emphasis is placed on the uses, actions, indications, administration, and hazards of pharmacological agents. Upon completion, students should be able to demonstrate competence through written evaluations.

RCP 114	CARDIOPULMONARY ANATOMY AND PHYSIOLOGY	3	0	0	3
Prerequisites: BIO 163					
Corequisites: None					

This course provides a concentrated study of cardiopulmonary anatomy and physiology essential to the practice of respiratory care. Emphasis is placed on cardiovascular and pulmonary physiology, acid/base balance, and blood gas interpretation. Upon completion, students should be able to demonstrate competence in these concepts through written evaluation.

RCP 115	CARDIOPULMONARY PATHOPHYSIOLOGY	2	0	0	2
Prerequisites: BIO 163					
Corequisites: None					

This course introduces the etiology, pathogenesis, and physiology of cardiopulmonary diseases and disorders. Emphasis is placed on clinical signs and symptoms along with diagnoses, complications, prognoses, and management. Upon completion, students should be able to demonstrate competence in these concepts through written evaluations.

RCP 135	RCP CLINICAL PRACTICE I	0	0	15	5
Prerequisites: Enrollment in the Respiratory Care program					
Corequisites: RCP 110					

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

RCP 145	RCP CLINICAL PRACTICE II	0	0	15	5
Prerequisites: RCP 110					
Corequisites: RCP 111					

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

RCP 153	RCP CLINICAL PRACTICE III	0	0	9	3
Prerequisites: RCP 111					
Corequisites: RCP 112					

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

RCP 210	CRITICAL CARE CONCEPTS	3	3	0	4
Prerequisites: Successful completion of three semesters of the Respiratory Care program					
Corequisites: None					

This course provides further refinement of acute patient care and underlying pathophysiology. Topics include a continuation in the study of mechanical ventilation, underlying pathophysiology, and introduction of critical care monitoring. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations.

RCP 211	ADVANCED MONITORING/ PROCEDURES	3	3	0	4
Prerequisites: RCP 210					
Corequisites: None					

This course includes advanced information gathering and decision making for the respiratory care professional. Topics include advanced cardiac monitoring and special procedures. Upon completion, students should be able to evaluate, design, and recommend appropriate care plans through written and laboratory evaluations.

RCP 214	NEONATAL/PEDIATRIC RESPIRATORY CARE	1	3	0	2
Prerequisites: RCP 111					
Corequisites: None					

This course provides in-depth coverage of the concepts of neonatal and pediatric respiratory care. Emphasis is placed on neonatal and pediatric pathophysiology and on the special therapeutic needs of neonates and children. Upon completion, students should be able to demonstrate competence in these concepts through written and laboratory evaluations.

RCP 215	CAREER PREPARATION-ADVANCED LEVEL	0	3	0	1
Prerequisites: Enrollment in the Respiratory Care program					
Corequisites: None					

This course provides preparation for employment and the advanced-level practitioner credentialing exam. Emphasis is placed on review of the NBRC Advanced-Level Practitioner Exam and supervision and management. Upon completion, students should be able to successfully complete the appropriate self-assessment examinations and meet the requirements for employment.

RCP 235	RCP CLINICAL PRACTICE IV	0	0	15	5
Prerequisites: RCP 111					
Corequisites: RCP 210					

This course provides advanced practitioner clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

RCP 247	RCP CLINICAL PRACTICE V	0	0	21	7
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Prerequisites: RCP 210  
Corequisites: RCP 211

This course provides advanced practitioner clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

## REAL ESTATE APPRAISAL

REA 101	INTRODUCTION TO REAL ESTATE APPRAISAL R-1	2	0	0	2
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Prerequisites: None  
Corequisites: None

This course provides an introduction to the entire valuation process, with specific coverage of residential neighborhood and property analysis. Topics include basic real property law, concepts of value and operation of real estate markets, mathematical and statistical concepts, finance, and residential construction/design. Upon completion, students should be able to demonstrate adequate preparation for REA 102. *This course is required for the Real Estate Appraisal certificate.*

REA 102	VALUATION PRINCIPLES AND PRACTICES R-2	2	0	0	2
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Prerequisites: REA 101  
Corequisites: None

This course introduces procedures used to develop an estimate of value and how the various principles of value relate to the application of such procedures. Topics include the sales comparison approach, site valuation, sales comparison, the cost approach, the income approach, and reconciliation. Upon completion, students should be able to complete the Uniform Residential Appraisal Report (URAR). *This course is required for the Real Estate Appraisal certificate.*

REA 103	APPLIED RESIDENTIAL PROPERTY VALUATION R-3	2	0	0	2
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Prerequisites: REA 102  
Corequisites: None

This course covers the laws and standards practiced by appraisers in the appraisal of residential 1-4 unit properties and small farms. Topics include Financial Institutions Reform and Recovery Enforcement Act (FIRREA), Uniform Standards of Professional Appraisal Practice (USPAP), and North Carolina statutes and rules. Upon completion, students should be able to demonstrate eligibility to sit for the NC Appraisal Board license trainee examination and to enroll in REA 201. *This course is required for the Real Estate Appraisal certificate.*

		Class	Lab	Clin/ WExp	Credit Hours
REA 201	INTRODUCTION TO INCOME PROPERTY APPRAISAL G-1	2	0	0	2
Prerequisites: REA 103					
Corequisites: None					

This course introduces concepts and techniques used to appraise real estate income properties. Topics include real estate market analysis, property analysis and site valuation, how to use financial calculators, present value, NOI, and before-tax cash flow. Upon completion, students should be able to estimate income property values using direct capitalization and to sit for the NC Certified Residential Appraiser examination. *This course is required for the Real Estate Appraisal certificate.*

REA 202	ADVANCED INCOME CAPITALIZATION PROCEDURES G-2	2	0	0	2
Prerequisites: REA 201					
Corequisites: A financial calculator is required for this course					

This course expands direct capitalization techniques and introduces yield capitalization. Topics include yield rates, discounted cash flow, financial leverage, and traditional yield capitalization formulas. Upon completion, students should be able to estimate the value of income producing property using yield capitalization techniques. *This course is required for the Real Estate Appraisal certificate.*

REA 203	APPLIED INCOME PROPERTY VALUATION G-3	2	0	0	2
Prerequisites: REA 202					
Corequisites: None					

This course covers the laws, rules, and standards pertaining to the principles and practices applicable to the appraisal of income properties. Topics include FIRREA, USPAP, Uniform Commercial and Industrial Appraisal Report (UCIAR) form, North Carolina statutes and rules, and case studies. Upon completion, students should be able to prepare a narrative report that conforms to the USPAP and sit for the NC Certified General Appraisal examination. *This course is required for the Real Estate Appraisal certificate.*

## READING

RED 070	ESSENTIAL READING SKILLS	3	2	0	4
Prerequisites: None					
Corequisites: None					

This course is designed for those with limited reading skills. Emphasis is placed on basic word attack skills, vocabulary, transitional words, paragraph organization, basic comprehension skills, and learning strategies. Upon completion, students

	Class	Lab	Clin/ WExp	Credit Hours
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should be able to demonstrate competence in the skills required for RED 080. *This course does not satisfy the developmental reading prerequisite for ENG 111 or ENG 111A.*

## RELIGION

REL 110	WORLD RELIGIONS	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

REL 211	INTRODUCTION TO THE OLD TESTAMENT	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

REL 212	INTRODUCTION TO THE NEW TESTAMENT	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course is a survey of the literature of first century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

		Class	Lab	Clin/ WExp	Credit Hours
<b>REAL ESTATE</b>					
RLS 112	REAL ESTATE FUNDAMENTALS	4	0	0	4
Prerequisites: None					
Corequisites: None					

This course provides basic instruction in real estate principles and practices. Topics include law, finance, brokerage, closing, valuation, management, taxation, mathematics, construction, land use, property insurance, and NC License Law and Commission Rules. Upon completion, students should be able to demonstrate basic knowledge and skills necessary for real estate sales.

RLS 113	REAL ESTATE MATHEMATICS	2	0	0	2
Prerequisites: None					
Corequisites: None					

This course provides basic instruction in business mathematics applicable to real estate situations. Topics include area computations, percentage of profit/loss, bookkeeping and accounting methods, appreciation and depreciation, financial calculations and interest yields, property valuation, insurance, taxes, and commissions. Upon completion, students should be able to demonstrate proficiency in applied real estate mathematics.

RLS 114	REAL ESTATE BROKERAGE	2	0	0	2
Prerequisites: RLS 112 or current Real Estate license					
Corequisites: None					

This course provides basic instruction in the various real estate brokerage operations, including trust account records and procedures. Topics include establishing a brokerage firm, management concepts and practices, personnel and training, property management, advertising and publicity, records and bookkeeping systems, and financial operations. Upon completion, students should be able to establish, operate, and manage a realty brokerage practice in a manner which protects and serves the public interest.

RLS 115	REAL ESTATE FINANCE	2	0	0	2
Prerequisites: RLS 112 or current Real Estate license					
Corequisites: None					

This course provides advanced instruction in financing real estate transactions and real property valuation. Topics include sources of mortgage funds, financing instruments, mortgage types, loan underwriting, essential mathematics, and property valuation. Upon completion, students should be able to demonstrate knowledge of real estate finance necessary to act as real estate brokers.

RLS 116	REAL ESTATE LAW	2	0	0	2
Prerequisites: RLS 112 or current Real Estate license					

Corequisites: None

This course provides advanced instruction in legal aspects of real estate brokerage. Topics include property ownership and interests, brokerage relationships, agency law, contracts, settlement statements, and NC License Law and Commission Rules. Upon completion, students should be able to demonstrate knowledge of laws relating to real estate brokerage necessary to act as real estate brokers.

## RADIATION THERAPY TECHNOLOGY

RTT 121	SPECIAL IMAGING	2	0	0	2
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Prerequisites: RAD 121 and RTT 151  
Corequisites: BIO 271 and RTT 161

This course introduces special imaging modalities including computed tomography and magnetic resonance imaging. Emphasis is placed on the comparison of computed tomography and magnetic resonance imaging for the visualization of various neoplasms. Upon completion, students should be able to demonstrate proper utilization of special imaging modalities relative to radiation treatment planing.

RTT 151	RTT CLINICAL EDUCATION II	0	0	9	3
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Prerequisites: RAD 110, RAD 111, and RAD 151  
Corequisites: RAD 121

This course provides additional experience in patient management and in the more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax, and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RTT 161	RTT CLINICAL EDUCATION III	0	0	6	2
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Prerequisites: RAD 121 and RTT 151  
Corequisites: BIO 271 and RTT 121

This course provides the opportunity to become proficient in basic procedures and gain experience in advanced areas. Emphasis is placed on special imaging areas to include computed tomography and magnetic resonance imaging with an introduction to radiation therapy. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RTT 210	RADIOBIOLOGY	2	0	0	2
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Prerequisites: BIO 271, RTT 121, and RTT 161,  
Corequisites: RTT 220, RTT 221, RTT 233, and RTT 238 or 240

This course focuses on the biological effects of ionizing radiation, tissue sensitivity, and tissue response to radiation. Emphasis is placed on methods of radiation protection applicable to tumor localization and treatment delivery. Upon completion, students should be able to demonstrate an understanding of the effects of ionizing radiation on the body.

RTT 220	RADIATION THERAPY ORIENTATION	2	0	0	2
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Prerequisites: BIO 271, RTT 121, and RTT 161,

Corequisites: RTT 210, RTT 221, RTT 233, and RTT 238 or 240

This course introduces the operations of radiation therapy departments. Emphasis is placed on patient care in the clinical setting, familiarization with therapy equipment, and the role of the radiation therapist. Upon completion, students should be able to demonstrate an understanding of the roles of a radiation therapist.

RTT 221	CLINICAL ONCOLOGY I	2	0	0	2
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Prerequisites: BIO 271, RTT 121, and RTT 161

Corequisites: RTT 210, RTT 220, RTT 233, and RTT 240

This course introduces the principles of carcinogenesis and neoplasia. Emphasis is placed on cancer development in relation to specific anatomical sites. Upon completion, students should be able to recognize factors related to cancer development and state treatment options for each anatomical site included.

RTT 222	CLINICAL ONCOLOGY II	2	0	0	2
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Prerequisites: RTT 210, RTT 220, RTT 221, RTT 233, and RTT 240

Corequisites: BIO 271 and RTT 231, RTT 241

This course continues the study of neoplasia in relation to specific anatomical systems. Emphasis is placed on cancer development in relation to specific anatomical sites. Upon completion, students should be able to recognize factors related to cancer development and state treatment options for each anatomical site included.

RTT 232	RADIATION THERAPY PROCEDURES	2	0	0	2
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Prerequisites: RTT 222, RTT 234, and RTT 241

Corequisites: RTT 246

This course covers routine and new techniques in simulation and treatment procedures. Emphasis is placed on treatment choices relative to the tumor site and modality selected. Upon completion, students should be able to demonstrate an understanding of basic and advanced treatment procedures.

RTT 233	RADIATION THERAPY PHYSICS	2	0	0	2
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Prerequisites: BIO 271, RTT 122, and RTT 161

Corequisites: RTT 210, RTT 220, RTT 221, and RTT 240

This course provides a study of the interaction of radiation with matter. Emphasis is placed on atomic interactions and dose measurement techniques. Upon completion, students should be able to demonstrate a knowledge of radiation interactions and dose measurement procedures as they apply to radiation safety.

RTT 234	CLINICAL DOSIMETRY	1	3	0	2
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Prerequisites: RTT 210, RTT 220, RTT 221, RTT 233, RTT 240  
Corequisites: RTT 222 and RTT 241

This course is a study of clinical dosimetry and treatment planning. Emphasis is placed on treatment planning techniques and beam arrangements. Upon completion, students should be able to demonstrate a knowledge of dosimetry procedures used to treat various neoplasms.

RTT 240	RTT CLINICAL EDUCATION IV	0	0	18	6
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Prerequisites: BIO 271, RTT 121, and RTT 161  
Corequisites: RTT 210, RTT 220, RTT 221, and RTT 233

This course provides clinical experience in the use of equipment and patient positioning in both simulation and delivery of radiation therapy treatments. Emphasis is placed on the varied aspects of the radiation therapy department and patient progression through evaluation, treatment, and follow-up. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RTT 241	RTT CLINICAL EDUCATION V	0	0	21	7
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Prerequisites: RTT 210, RTT 220, RTT 221, and RTT 233  
Corequisites: RTT 222 and RTT 231

This course provides additional experience in patient management. Emphasis is placed on the development and refinement of technical skills within the radiation therapy department. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RTT 246	RTT CLINICAL EDUCATION VI	0	0	18	6
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Prerequisites: RTT 222, RTT 234, and RTT 241  
Corequisites: RTT 232

This course promotes clinical practice on a more independent level of performance. Emphasis is placed on the utilization of equipment, patient care techniques, and treatment considerations for more complicated radiation therapy procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

		Class	Lab	Clin/ WExp	Credit Hours
<b>SUBSTANCE ABUSE</b>					
SAB 130	ADDICTIVE BEHAVIORS	3	0	0	3
Prerequisites: PSY 150 or permission of instructor					
Corequisites: None					

This course surveys and investigates addiction patterns and various methods of treatment. Emphasis is placed on sociocultural, psychological, and physiological theories of substance abuse and treatment. Upon completion, students should be able to demonstrate an understanding of theories of substance abuse and treatment.

## **SOCIOLOGY**

SOC 210	INTRODUCTION TO SOCIOLOGY	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

SOC 213	SOCIOLOGY OF THE FAMILY	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

SOC 215	GROUP PROCESSES	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course introduces group processes and dynamics. Emphasis is placed on small group experiences, roles and relationships within groups, communication,

		Class	Lab	Clin/ WExp	Credit Hours
cooperation and conflict resolution, and managing diversity within and among groups. Upon completion, students should be able to demonstrate the knowledge and skills essential to analyze group interaction and to work effectively in a group context.					
SOC 220	SOCIAL PROBLEMS	3	0	0	3
Prerequisites: None					
Corequisites: None					
This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.</i>					
SOC 225	SOCIAL DIVERSITY	3	0	0	3
Prerequisites: None					
Corequisites: None					
This course provides a comparison of diverse roles, interests, opportunities, contributions, and experiences in social life. Topics include race, ethnicity, gender, sexual orientation, class, and religion. Upon completion, students should be able to analyze how cultural and ethnic differences evolve and how they affect personality development, values, and tolerance. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.</i>					
SOC 240	SOCIAL PSYCHOLOGY	3	0	0	3
Prerequisites: None					
Corequisites: None					
This course examines the influence of culture and social groups on individual behavior and personality. Emphasis is placed on the process of socialization, communication, conformity, deviance, interpersonal attraction, intimacy, race and ethnicity, small group experiences, and social movements. Upon completion, students should be able to identify and analyze cultural and social forces that influence the individual in a society. <i>This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.</i>					
SOC 242	SOCIOLOGY OF DEVIANCE	3	0	0	3
Prerequisites: None					
Corequisites: None					

		Class	Lab	Clin/ WExp	Credit Hours
<p>This course provides an overview of deviant behavior and the processes involved in its definition, causation, prevention, control, and treatment. Topics include theories of causation, social control, delinquency, victimization, criminality, the criminal justice system, punishment, rehabilitation, and restitution. Upon completion, students should be able to identify and analyze issues surrounding the nature and development of social responses to deviance.</p>					

SOC 252	SOCIOLOGY OF WORK	3	0	0	3
Prerequisites: None					
Corequisites: None					

This course provides an understanding of the work experience in terms of rewards, satisfaction, exploitation, alienation, and institutional function and structure. Topics include an examination of industrial, professional, office, and executive work settings in relation to technology, management, and career opportunities. Upon completion, students should be able to understand work in its changing roles, institutions, and economic impact.

## SONOGRAPHY

SON 110	INTRODUCTION TO SONOGRAPHY	1	3	3	3
Prerequisites: Enrollment in the Medical Sonography or Cardiovascular Sonography programs					
Corequisites: SON 130					

This course provides an introduction to medical sonography. Topics include applications, sonographic terminology, history, patient care, ethics, and basic skills. Upon completion, students should be able to define professionalism and sonographic applications and perform basic patient care skills and preliminary scanning techniques.

SON 111	SONOGRAPHIC PHYSICS	3	3	0	4
Prerequisites: CVS 163 or SON 110					
Corequisites: None					

This course introduces ultrasound physical principles, bioeffects, and sonographic instrumentation. Topics include sound wave mechanics, transducers, sonographic equipment, Doppler physics, bioeffects, and safety. Upon completion, students should be able to demonstrate knowledge of sound wave mechanics, transducers, sonography equipment, the Doppler effect, bioeffects, and safety.

SON 120	SON CLINICAL EDUCATION I	0	0	15	5
Prerequisites: SON 110					
Corequisites: None					

This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON 121	SON CLINICAL EDUCATION II	0	0	15	5
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Prerequisites: SON 120  
Corequisites: None

This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON 130	ABDOMINAL SONOGRAPHY I	2	3	0	3
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Prerequisites: Enrollment in the Medical Sonography program  
Corequisites: None

This course introduces abdominal and small parts sonography. Emphasis is placed on the sonographic anatomy of the abdomen and small parts with correlated laboratory exercises. Upon completion, students should be able to recognize and acquire basic abdominal and small parts images.

SON 131	ABDOMINAL SONOGRAPHY II	1	3	0	2
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Prerequisites: SON 130  
Corequisites: None

This course covers abdominal and small parts pathology recognizable on sonograms. Emphasis is placed on abnormal sonograms of the abdomen and small parts with correlated sonographic cases. Upon completion, students should be able to recognize abnormal pathological processes in the abdomen and on small parts sonographic examinations.

SON 140	GYNECOLOGICAL SONOGRAPHY	2	0	0	2
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Prerequisites: SON 110 or enrollment in the Medical Sonography program  
Corequisites: None

This course is designed to relate gynecological anatomy and pathology to sonography. Emphasis is placed on gynecological relational anatomy, endovaginal anatomy, and gynecological pathology. Upon completion, students should be able to recognize normal and abnormal gynecological sonograms.

SON 220	SON CLINICAL EDUCATION III	0	0	24	8
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Prerequisites: SON 110 and SON 121  
Corequisites: None

		Class	Lab	Clin/ WExp	Credit Hours
<p>This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.</p>					
SON 221	SON CLINICAL EDUCATION IV	0	0	24	8
Prerequisites: SON 220					
Corequisites: None					
<p>This course provides continued active participation off-campus in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.</p>					
SON 225	CASE STUDIES	0	3	0	1
Prerequisites: SON 110					
Corequisites: None					
<p>This course offers the opportunity to present interesting cases found during clinical education. Emphasis is placed on presentation methods which integrate patient history, laboratory results, and sonographic findings with reference to current literature. Upon completion, students should be able to correlate information necessary for complete presentation of case studies.</p>					
SON 241	OBSTETRICAL SONOGRAPHY I	2	0	0	2
Prerequisites: SON 110 or enrollment in the Medical Sonography certificate program					
Corequisites: None					
<p>This course covers normal obstetrical sonography techniques, the normal fetal environment, and abnormal first trimester pregnancy states. Topics include gestational dating, fetal anatomy, uterine environment, and first trimester complications. Upon completion, students should be able to produce gestational sonograms which document age, evaluate the uterine environment, and recognize first trimester complications.</p>					
SON 242	OBSTETRICAL SONOGRAPHY II	2	0	0	2
Prerequisites: SON 241					
Corequisites: None					
<p>This course covers second and third trimester obstetrical complications and fetal anomalies. Topics include abnormal fetal anatomy and physiology and complications in the uterine environment. Upon completion, students should be able to identify fetal anomalies, fetal distress states, and uterine pathologies.</p>					
SON 250	VASCULAR SONOGRAPHY	1	3	0	2
Prerequisites: SON 111					

Corequisites: None

This course provides an in-depth study of the anatomy and pathology of the vascular system. Topics include peripheral arterial, peripheral venous, and cerebrovascular disease testing. Upon completion, students should be able to identify normal vascular anatomy and recognize pathology of the vascular system.

SON 289	SONOGRAPHIC TOPICS	2	0	0	2
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Prerequisites: SON 110 and SON 220  
Corequisites: SON 221

This course provides an overview of sonographic topics in preparation for certification examinations. Emphasis is placed on registry preparation. Upon completion, students should be able to demonstrate a comprehensive knowledge of sonography and be prepared for the registry examinations.

## SPANISH

SPA 111	ELEMENTARY SPANISH I	2	2	0	3
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Prerequisites: None  
Corequisites: None

This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish, and to demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

SPA 112	ELEMENTARY SPANISH II	2	2	0	3
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Prerequisites: SPA 111  
Corequisites: None

This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish, and to demonstrate further cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

		Class	Lab	Clin/ WExp	Credit Hours
<b>SURVEYING</b>					
SRV 110	SURVEYING I	2	6	0	4
Prerequisites: EGR 115 and MAT 121					
Corequisites: None					

This course introduces the theory and practice of plane surveying. Topics include measuring distances and angles, differential and profile leveling, compass applications, topography, and mapping. Upon completion, students should be able to use/care for surveying instruments, demonstrate field note techniques, and apply the theory and practice of plane surveying.

SRV 111	SURVEYING II	2	6	0	4
Prerequisites: SRV 110					
Corequisites: None					

This course introduces route surveying and roadway planning and layout. Topics include simple, compound, reverse, spiral and vertical curves; geometric design and layout; planning of cross-section and grade line; drainage; earthwork calculations; and mass diagrams. Upon completion, students should be able to calculate and layout highway curves; prepare roadway plans, profiles, and sections; and perform slope staking.

## **WELDING**

WLD 110	CUTTING PROCESSES	1	3	0	2
Prerequisites: None					
Corequisites: None					

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.

WLD 112	BASIC WELDING PROCESSES	1	3	0	2
Prerequisites: None					
Corequisites: None					

This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.

		Class	Lab	Clin/ WExp	Credit Hours
WLD 115	SMAW (STICK) PLATE	2	9	0	5
Prerequisites: None					
Corequisites: None					

This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

WLD 116	SMAW (STICK) PLATE/PIPE	1	9	0	4
Prerequisites: WLD 115					
Corequisites: None					

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

WLD 121	GMAW (MIG) FCAW/PLATE	2	6	0	4
Prerequisites: None					
Corequisites: None					

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup, fillet, and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions.

WLD 122	GMAW (MIG) PLATE/PIPE	1	6	0	3
Prerequisites: WLD 121					
Corequisites: None					

This course is designed to enhance skills with the gas metal arc (MIG) welding process. Emphasis is placed on advancing skills with the GMAW process making groove welds on carbon steel plate and pipe in various positions. Upon completion, students should be able to perform groove welds with prescribed electrodes on various joint geometry.

WLD 131	GTAW (TIG) PLATE	2	6	0	4
Prerequisites: None					
Corequisites: None					

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion,

	Class	Lab	Clin/ WExp	Credit Hours
students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.				

WLD 132	GTAW (TIG) PLATE/PIPE	1	6	0	3
Prerequisites: WLD 131					
Corequisites: None					

This course is designed to enhance skills with the gas tungsten arc (TIG) welding process. Topics include setup, joint preparation, and electrode selection with emphasis on manipulative skills in all welding positions on plate and pipe. Upon completion, students should be able to perform GTAW welds with prescribed electrodes and filler materials on various joint geometry.

WLD 141	SYMBOLS AND SPECIFICATIONS	2	2	0	3
Prerequisites: None					
Corequisites: None					

This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

WLD 151	FABRICATION I	2	6	0	4
Prerequisites: WLD 110, WLD 115, WLD 116, and WLD 131					
Corequisites: None					

This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

WLD 215	SMAW (STICK) PIPE	1	9	0	4
Prerequisites: WLD 115 or WLD 116					
Corequisites: None					

This course covers the knowledge and skills that apply to welding pipe. Topics include pipe positions, joint geometry, and preparation with emphasis placed on bead application, profile, and discontinuities. Upon completion, students should be able to perform SMAW welds to applicable codes on carbon steel pipe with prescribed electrodes in various positions.

WLD 251	FABRICATION II	1	6	0	3
Prerequisites: WLD 151					
Corequisites: None					

This course covers advanced fabrication skills. Topics include advanced layout and assembly methods with emphasis on the safe and correct use of fabrication tools

	Class	Lab	Clin/ WExp	Credit Hours
and equipment. Upon completion, students should be able to fabricate projects from working drawings.				

WLD 262	INSPECTION AND TESTING	2	2	0	3
Prerequisites: None					
Corequisites: None					

This course introduces destructive and non-destructive testing methods. Emphasis is placed on safety, types and methods of testing, and the use of testing equipment and materials. Upon completion, students should be able to understand and/or perform a variety of destructive and non-destructive testing processes.

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# **Pitt Community College**

**Is An Equal Opportunity/Affirmative Action Institution  
And**

**It Is An Equal Opportunity/Affirmative Action Employer**

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